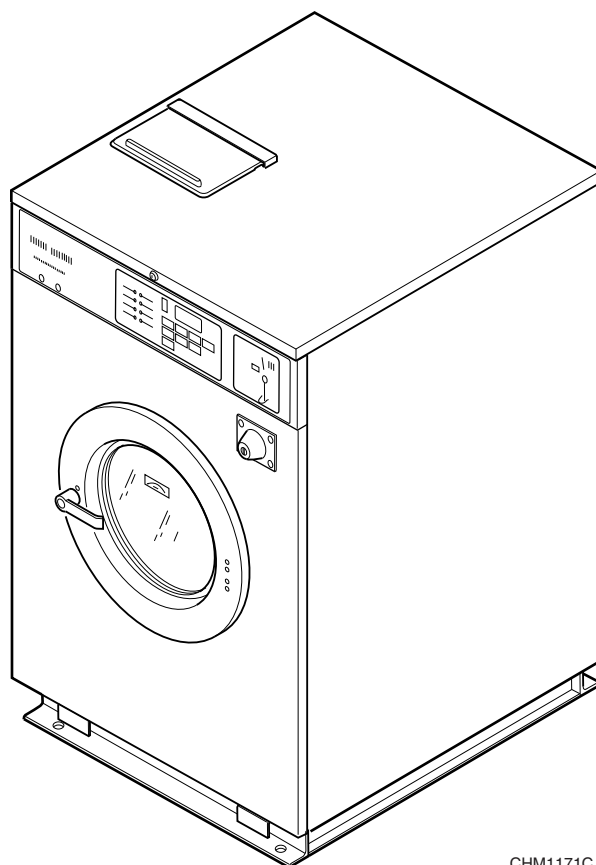


# Washer-Extractor

Cabinet Hardmount  
NetMaster

Refer to Page 8 for Model Numbers



CHM1171C

Troubleshooting



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# Safety Information

## Explanation of Safety Messages

Throughout this manual and on machine decals, you will find precautionary statements (“DANGER,” “WARNING,” and “CAUTION”) followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	<b>DANGER</b>
<p>Danger indicates the presence of a hazard that will cause severe personal injury, death or substantial property damage if the danger is ignored.</p>	

	<b>WARNING</b>
<p>Warning indicates the presence of a hazard that can cause severe personal injury, death or substantial property damage if the warning is ignored.</p>	

	<b>CAUTION</b>
<p>Caution indicates the presence of a hazard that will or can cause minor personal injury or property damage if the caution is ignored.</p>	


Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.


**IMPORTANT:** The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.


**NOTE:** The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.


## General Safety Precautions

In the interest of safety, some general precautions relating to the operation of this machine follow.

	<b>WARNING</b>
<ul style="list-style-type: none"><li>• Failure to install, maintain and/or operate this product according to the manufacturer’s instructions may result in conditions which can produce serious injury, death and/or property damage.</li><li>• Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and unless you understand and have the skills to carry out the servicing.</li><li>• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury or death.</li></ul>	
<small>W006R2</small>	


	<b>WARNING</b>
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none"><li>• Disconnect electric power to the washer-extractor before servicing.</li><li>• Never start the washer-extractor with any guards/panels removed.</li><li>• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer-extractor is properly grounded.</li></ul>	
<small>W460</small>	

	<b>WARNING</b>
<p>Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly or adjustments subjecting you, or the inexperienced person making such repairs, to the risk of serious injury, electrical shock, or death.</p>	
<small>W007</small>	

	<b>WARNING</b>
<p><b>If you or an unqualified person perform service on your product, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.</b></p>	
W008	

Always contact your dealer, distributor, service agent or the manufacturer about any problems or conditions you do not understand.

## Important Safety Instructions

	<b>WARNING</b>
<p><b>To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:</b></p>	
W023	

1. Read all instructions before using the washer.
2. Refer to the GROUNDING INSTRUCTIONS in the INSTALLATION manual (supplied with your washer) for the proper grounding of the washer.
3. Do not wash textiles that have been previously cleaned in, washed in, soaked in or spotted with gasoline, kerosene, waxes, cooking oils, dry-cleaning solvents or other flammable or explosive substances. They give off vapors that could ignite or explode.
4. Do not add gasoline, dry-cleaning solvents or other flammable or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
5. Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. **HYDROGEN GAS IS EXPLOSIVE.** If the hot water system has not been used for such a period, before using a washer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable. Do not smoke or use an open flame during this time.
6. Do not allow children to play on or in a washer. Close supervision of children is necessary when the washer is used near children.
7. Before the washer is removed from service or discarded, remove the door to the washing compartment.
8. Do not reach into the washer if the wash drum is moving.
9. Do not install or store the washer where it will be exposed to water and/or weather.
10. Do not tamper with the controls.
11. Do not repair or replace any part of the washer or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out.
12. To reduce the risk of an electrical shock or fire, **DO NOT** use an extension cord or an adapter to connect the washer to an electrical power source.
13. Use the washer only for its intended purpose, washing clothes.
14. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket.
15. **ALWAYS** disconnect the washer from its electrical supply before attempting any service.
16. Install the washer according to the **INSTALLATION INSTRUCTIONS**. All connections for water, drain, electrical power and grounding must comply with local codes and, when required, be made by licensed personnel.
17. To reduce the risk of fire, textiles which have traces of any flammable substances such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc. or anything containing wax or chemicals such as in mops or cleaning cloths, must not be put into the washer. These flammable substances may cause the fabric to ignite.
18. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
19. Keep the washer in good condition. Bumping or dropping the washer can damage its safety features. If this occurs, have the washer checked by a qualified service person.

## Safety Information

20. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
21. Be sure that water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.
22. The loading door **MUST BE CLOSED** any time the washer is to fill, tumble or spin. **DO NOT** bypass the loading door switch and permit the washer to operate with the loading door open.
23. Always read and follow the manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings and precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
24. Always follow the fabric care instructions supplied by the textile manufacturer.
25. Never operate the washer with any guards and/or panels removed.
26. **DO NOT** operate the washer with missing or broken parts.
27. **DO NOT** bypass any safety devices.
28. Failure to install, maintain and/or operate this washer according to the manufacturer's instructions may result in conditions that can produce bodily injury and/or property damage.

**NOTE: The WARNING and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining and operating the washer.**

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.



### WARNING

**This machine must be installed, adjusted, and serviced by qualified electrical maintenance personnel familiar with the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury and/or equipment damage, and may void the warranty.**

SW004

**IMPORTANT: Ensure that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.**



### WARNING

**Install the machine on a level floor of sufficient strength. Failure to do so may result in conditions which can produce serious injury, death and/or property damage.**

W703



### CAUTION

**Be careful around the open door, particularly when loading from a level below the door. Impact with door edges can cause personal injury.**

SW025



### WARNING

**Never touch internal or external steam pipes, connections, or components. These surfaces can be extremely hot and will cause severe burns. The steam must be turned off and the pipe, connections, and components allowed to cool before the pipe can be touched.**

SW014

## Safety Decals

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

To provide personal safety and keep the machine in proper working order, follow all maintenance and safety procedures presented in this manual. If questions regarding safety arise, contact the manufacturer immediately.

Use manufacturer-authorized spare parts to avoid safety hazards.

## Operator Safety



### WARNING

**NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.**

SW012

To ensure the safety of machine operators, the following maintenance checks must be performed daily:

1. Prior to operating the machine, verify that all warning signs are present and legible. Missing or illegible signs must be replaced immediately. Make certain that spares are available.
2. Check door interlock before starting operation of the machine:
  - a. Attempt to start the machine with the door open. The machine should not start with the door open.
  - b. Close the door without locking it and attempt to start the machine. The machine should not start with the door unlocked.
  - c. Close and lock the door and start a cycle. Attempt to open the door while the cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, call a service technician.
3. Do not attempt to operate the machine if any of the following conditions are present:
  - a. The door does not remain securely locked during the entire cycle.
  - b. Excessively high water level is evident.
  - c. Machine is not connected to a properly grounded circuit.

Do not bypass any safety devices in the machine.



### WARNING

**Never operate the machine with a bypassed or disconnected balance system. Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.**

SW039

# Introduction

## Customer Service

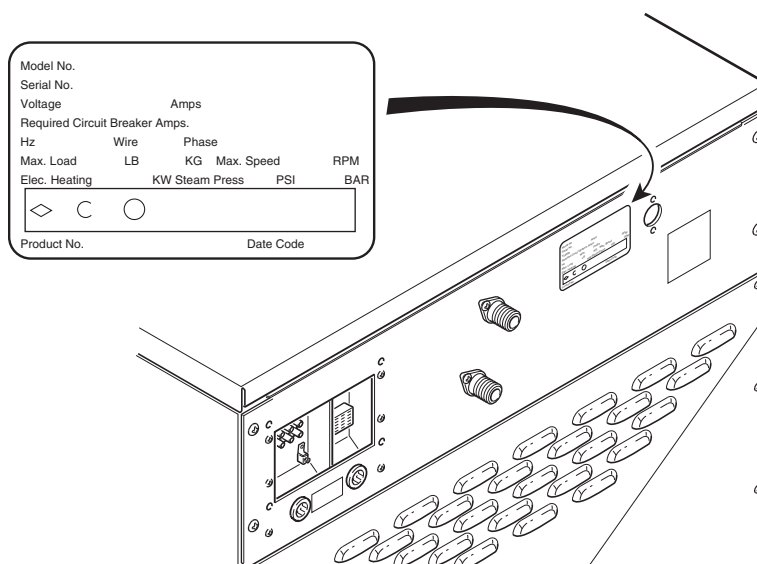
Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

If literature or replacement parts are required, contact the source from whom the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name of the nearest authorized parts distributor.

For technical assistance, call (920) 748-3121.

## Nameplate Location

When calling or writing about your product, be sure to mention model and serial numbers. Model and serial numbers are located on nameplate(s) as shown.



CHM2411P



## Model Identification

Information in this manual is applicable to these washers.

DC20NC2	HC35NP2	SC18NX2	SC30NX2	SC60NR2
DC25NC2	HC40NC2	SC20NC2	SC35NC2	SC60NRF
DC30NC2	HC50NC2	SC20NR2	SC35NP2	SC60NX2
DC40NC2	HC50NP2	SC20NX2	SC35NR2	SC60NXF
DC60NC2	HC60NC2	SC25NC2	SC35NX2	SC60NYF
HC18NC2	HC60NCF	SC25NP2	SC40NC2	SC80NCV
HC18NP2	HC80NCV	SC25NR2	SC40NR2	SC80NPV
HC20NC2	NC18NP2	SC25NX2	SC40NX2	SC80NRV
HC25NC2	NC27NP2	SC27NC2	SC50NC2	SC80NXV
HC25NP2	NC50NP2	SC27NP2	SC50NP2	SC80NYV
HC27NC2	NC80NPV	SC27NR2	SC50NR2	
HC27NP2	SC18NC2	SC27NX2	SC50NX2	
HC30NC2	SC18NP2	SC30NC2	SC60NC2	
HC35NC2	SC18NR2	SC30NR2	SC60NCF	

# Theory of Operation

## Starting the Machine

The door lock will not allow a cycle to be started until the door has been closed.

## Fill

The operator selects a cycle and starts the machine. Water enters the machine through water valves that are controlled by the microcomputer. As water fills the basket, a column of air is trapped in a pressure bulb and hose. The air pressure continues to increase as the basket fills with water. When the desired water level is reached, the water level switch triggers the microcomputer and the water valves turn off.

A vacuum breaker installed in the inlet plumbing prevents the backflow of water.

## Supply

The operator can either connect external liquid supplies to the machine or fill the supply dispenser with liquid or dry supplies. The supply dispenser's nozzles flush the compartments with water at the appropriate times throughout a cycle.

## Wash

The basket includes ribs that lift the laundry from the wash water. The laundry then tumbles back into the bath.

In 2-speed and variable-speed models, 1 dual-speed motor drives the basket's shaft with a V-belt. In 3-speed models, 2 motors drive the basket's cylinder with a V-belt.

18-60 pound capacity models use 2 bearings that are held in place by a single cast-iron trunnion that is bolted to the frame. 80 and 125-pound capacity models use 2 flange-type bearing that are bolted to the frame.

## Drain

Cabinet Hardmount washer-extractors use a normally open gravity-type drain system. No pump is used. When the drain valve opens, the perforated basket allows water to drain from it.

In the event of a power failure, the drain valve will open automatically and the machine will drain.

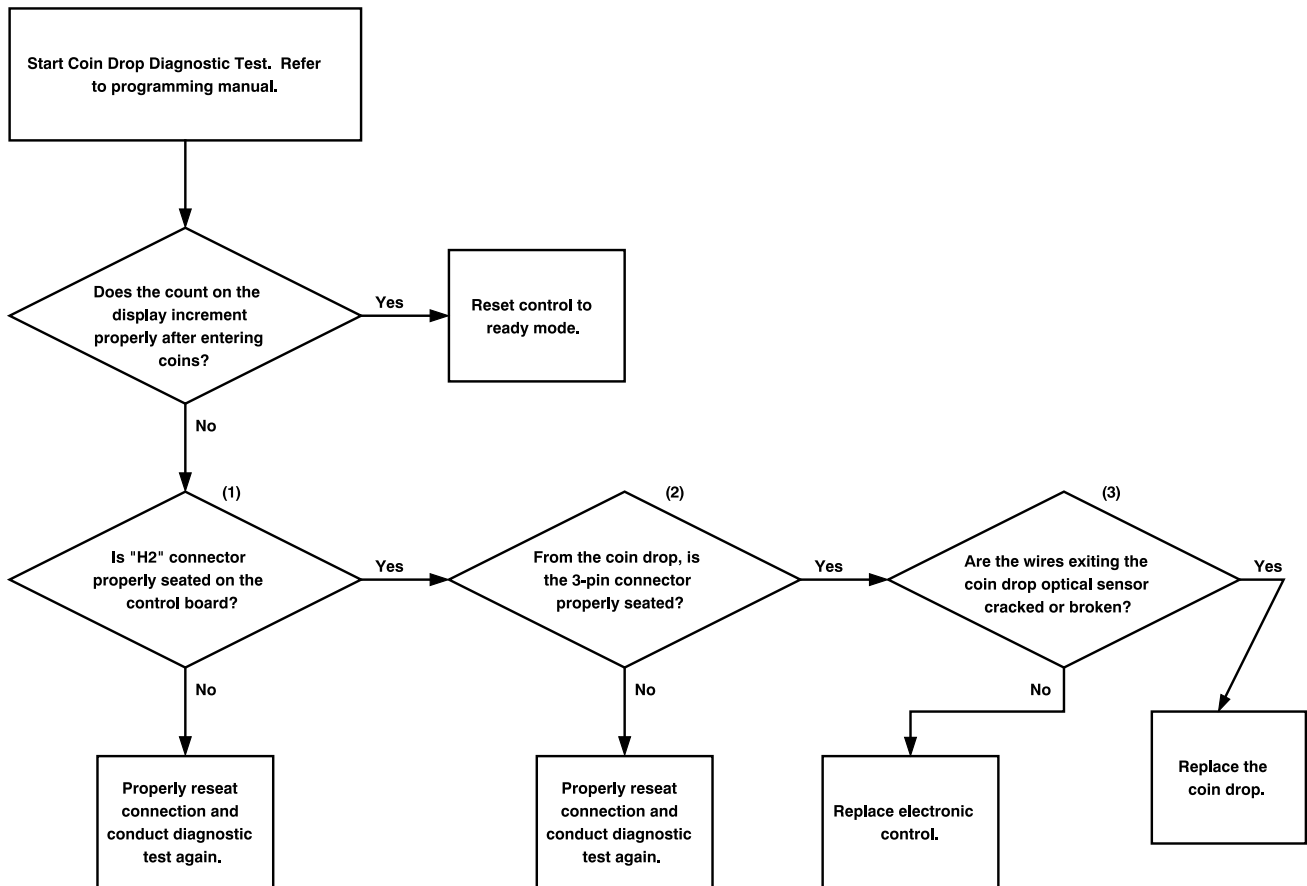
## Extract

A final high-speed extract step removes water from the load, which maximizes drying efficiency.

The door lock system will not allow the door to be opened until the cycle has finished.

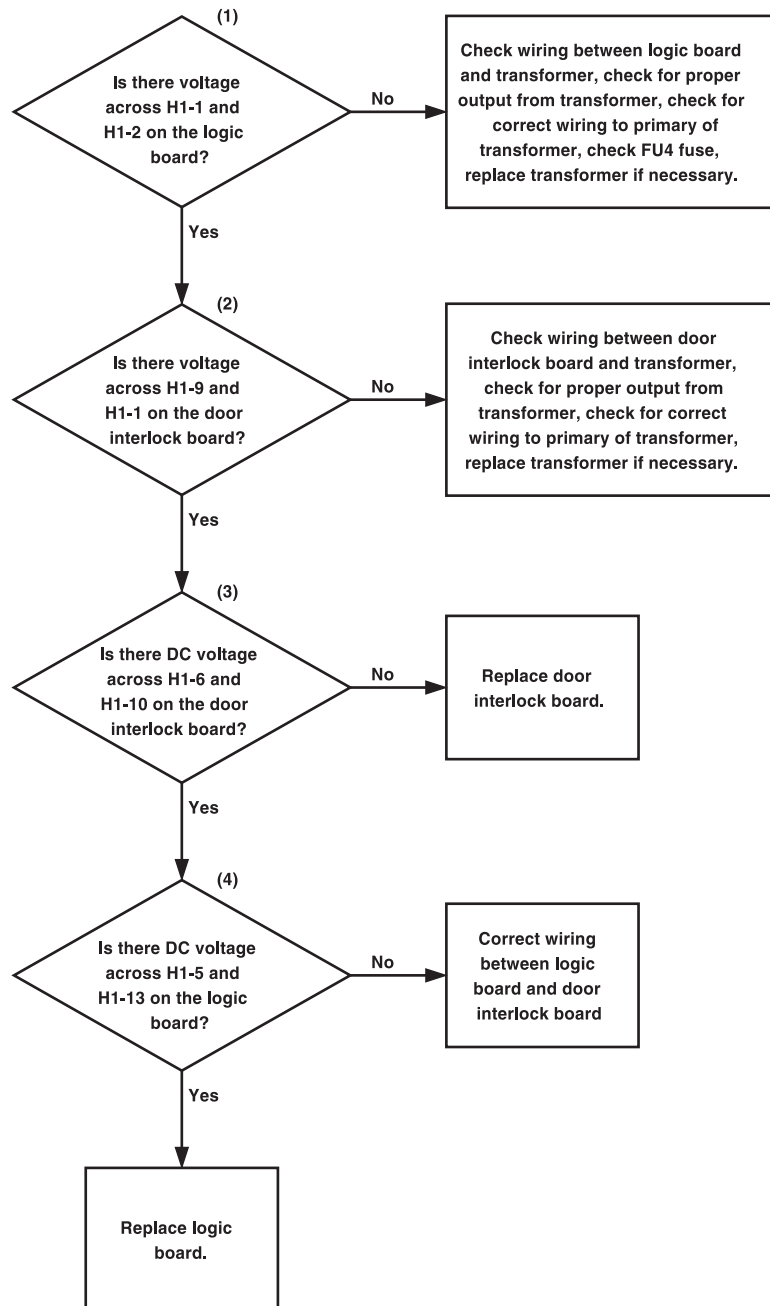
# Troubleshooting

## 1. Coins Ignored When Entered



CHM165S

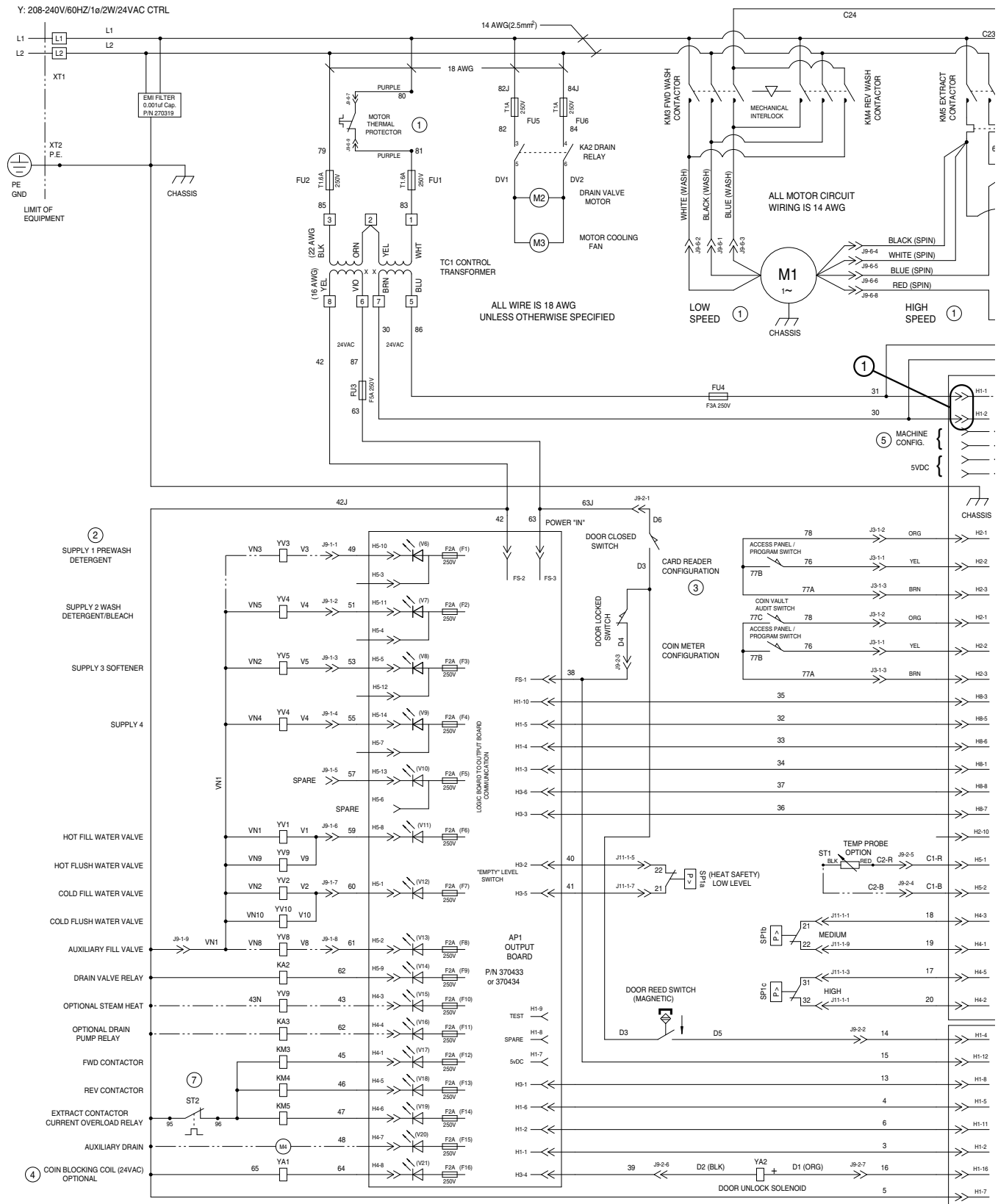
## 2. Control Has No Display



CHM166S

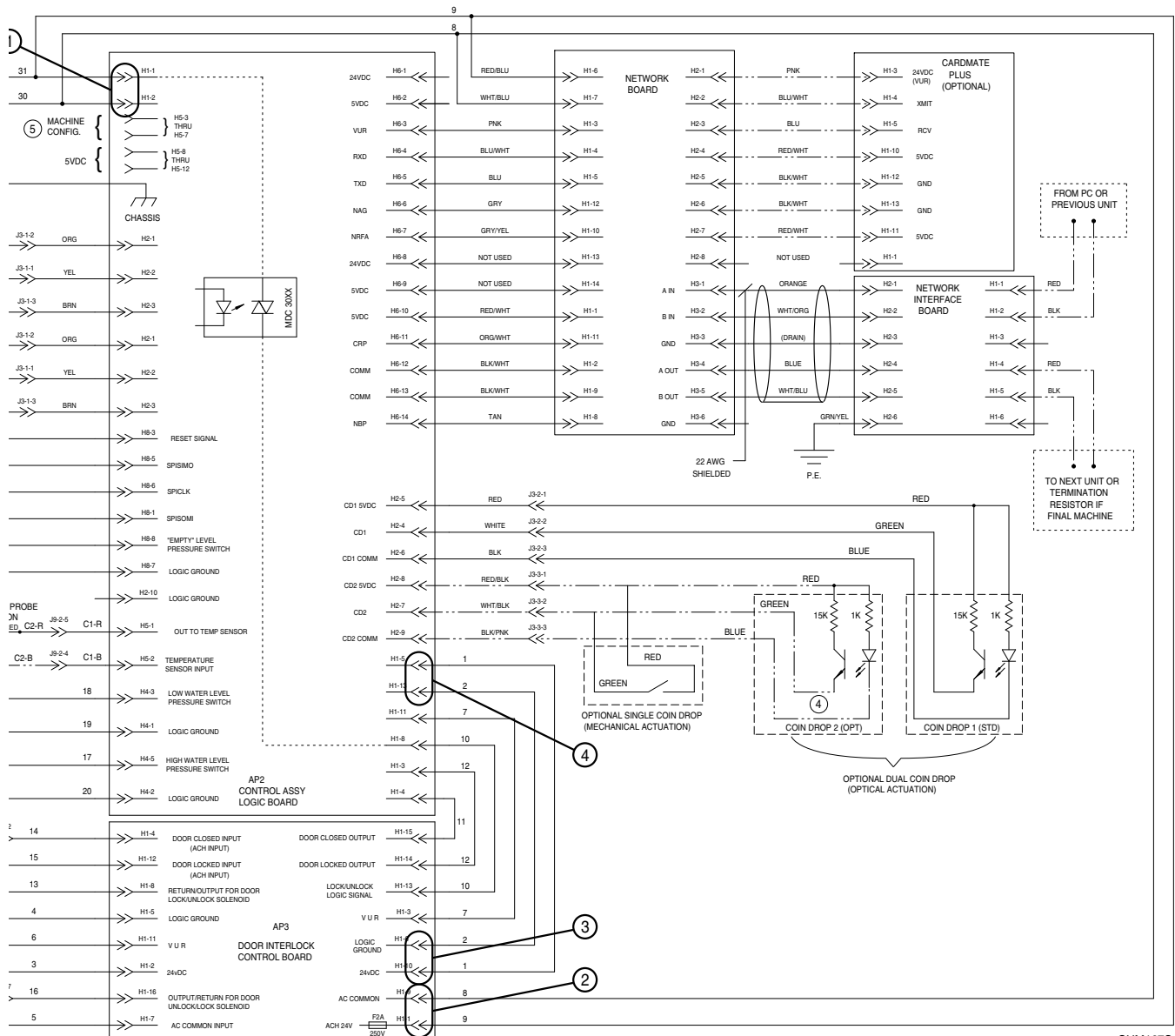
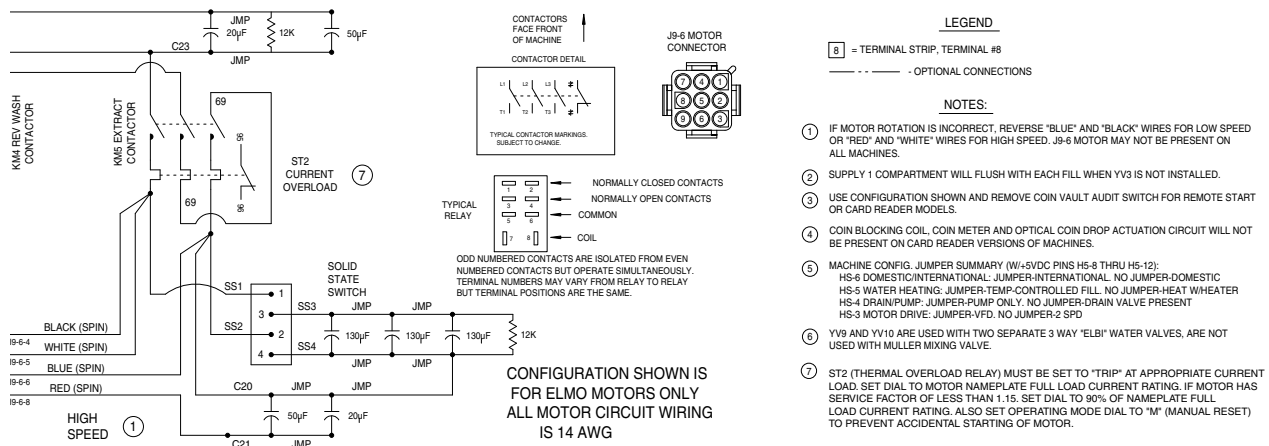
**Please see following 2 pages for wiring diagram information.**

## Control Has No Display (Sheet 1 of 2)



**NOTE: Refer to the wiring diagram supplied with your machine.**

# Control Has No Display (Sheet 2 of 2)



CHM167S

### 3. No Fill Analysis

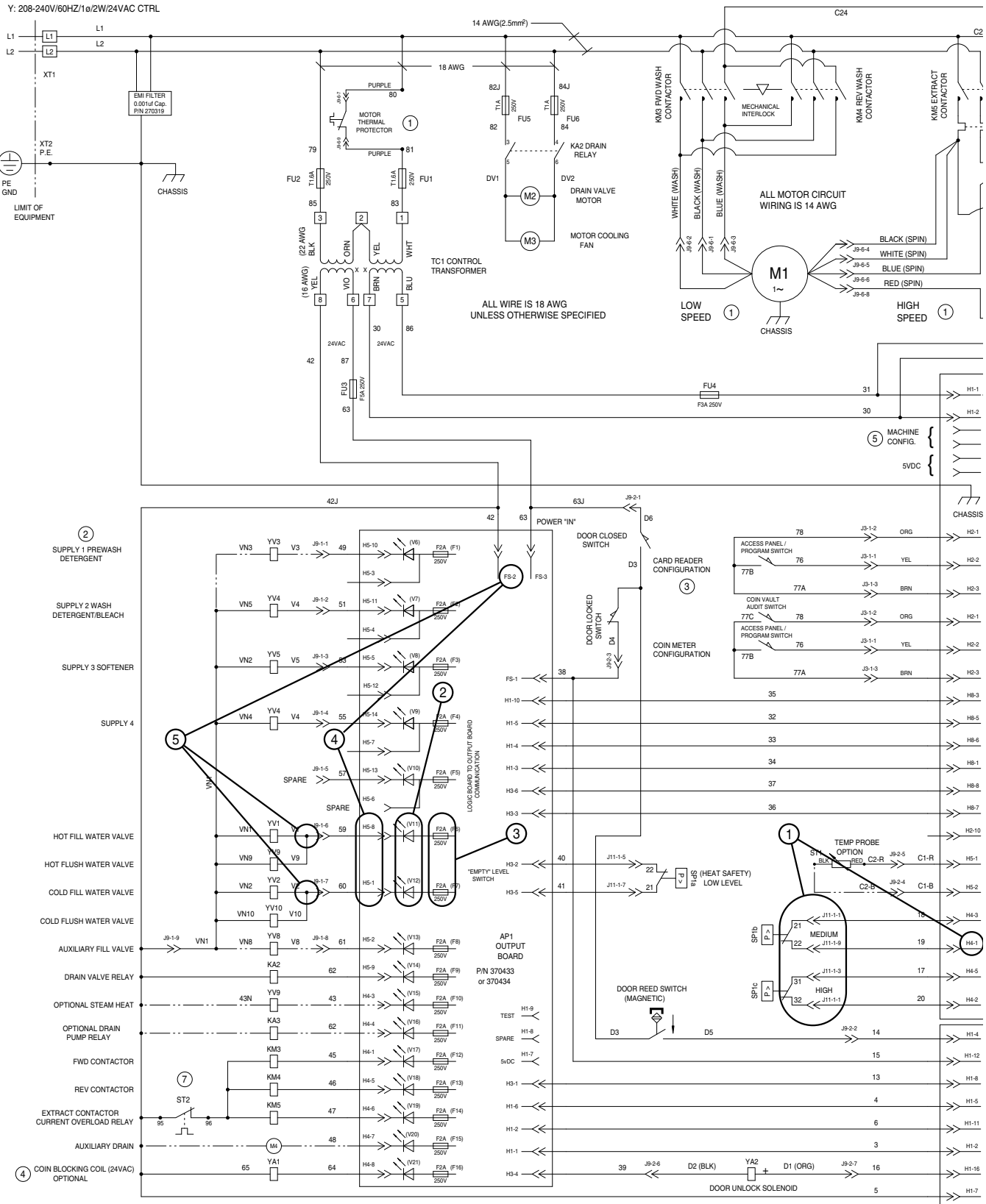


CHM457S



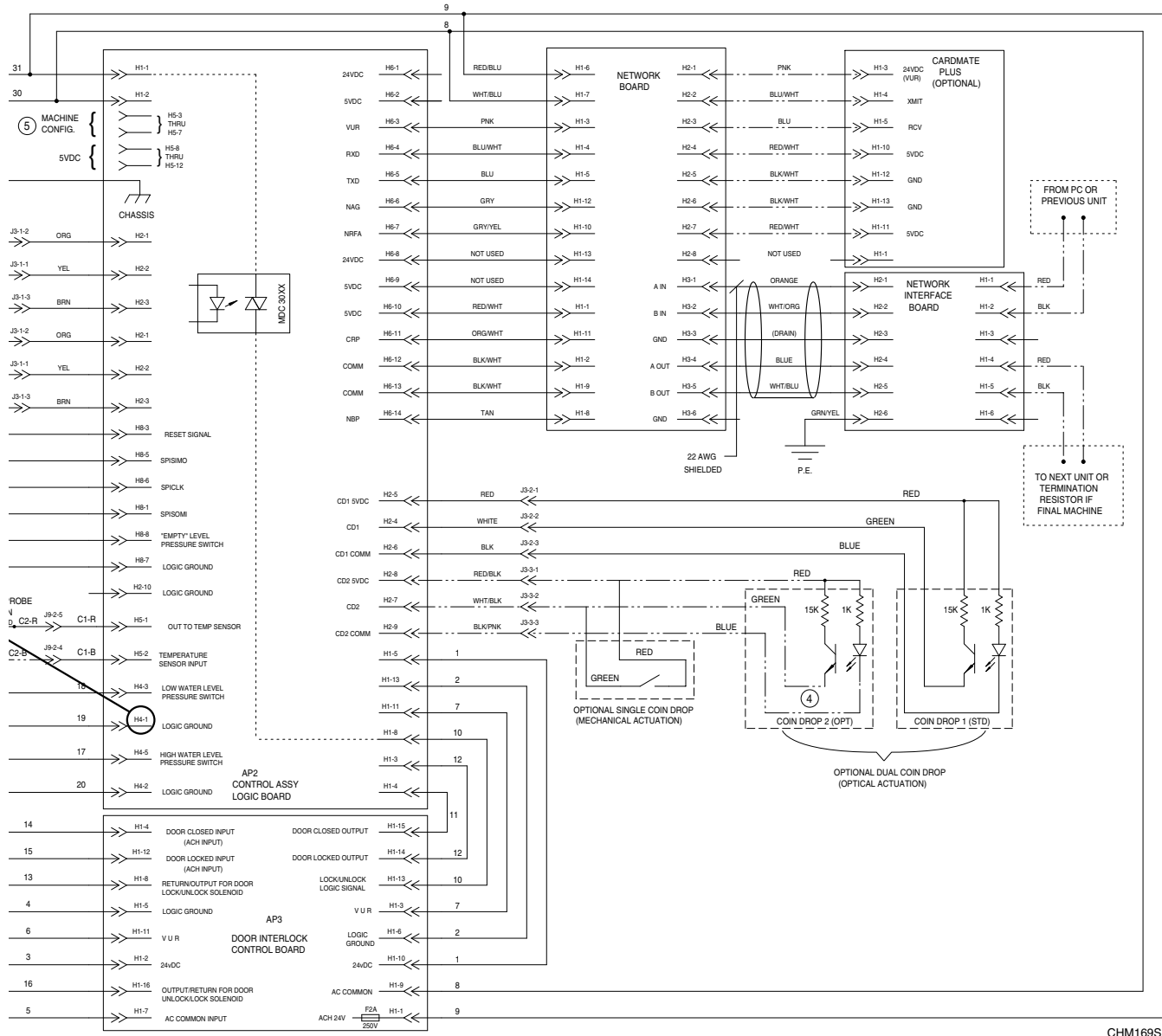
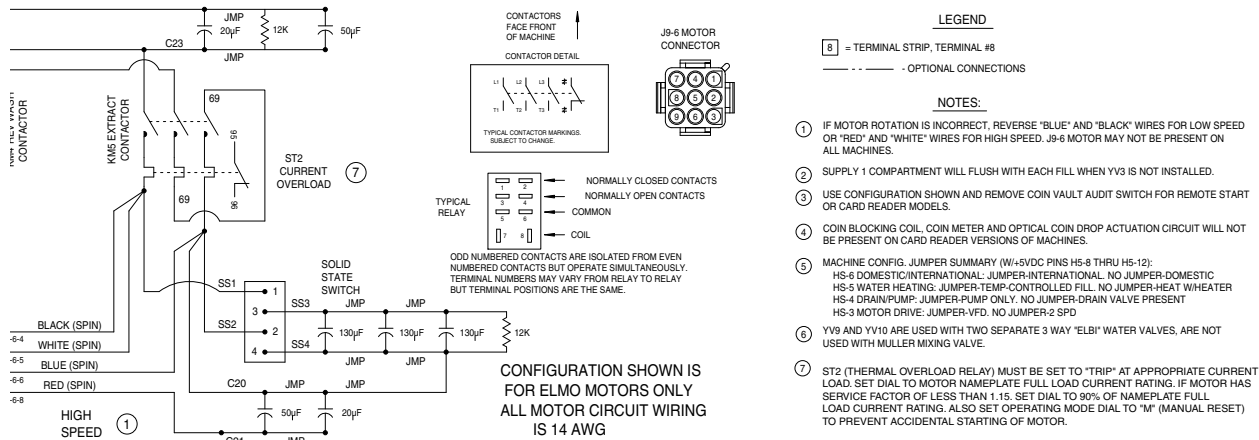
**Please see following 2 pages for wiring diagram information.**

## No Fill Analysis (Sheet 1 of 2)



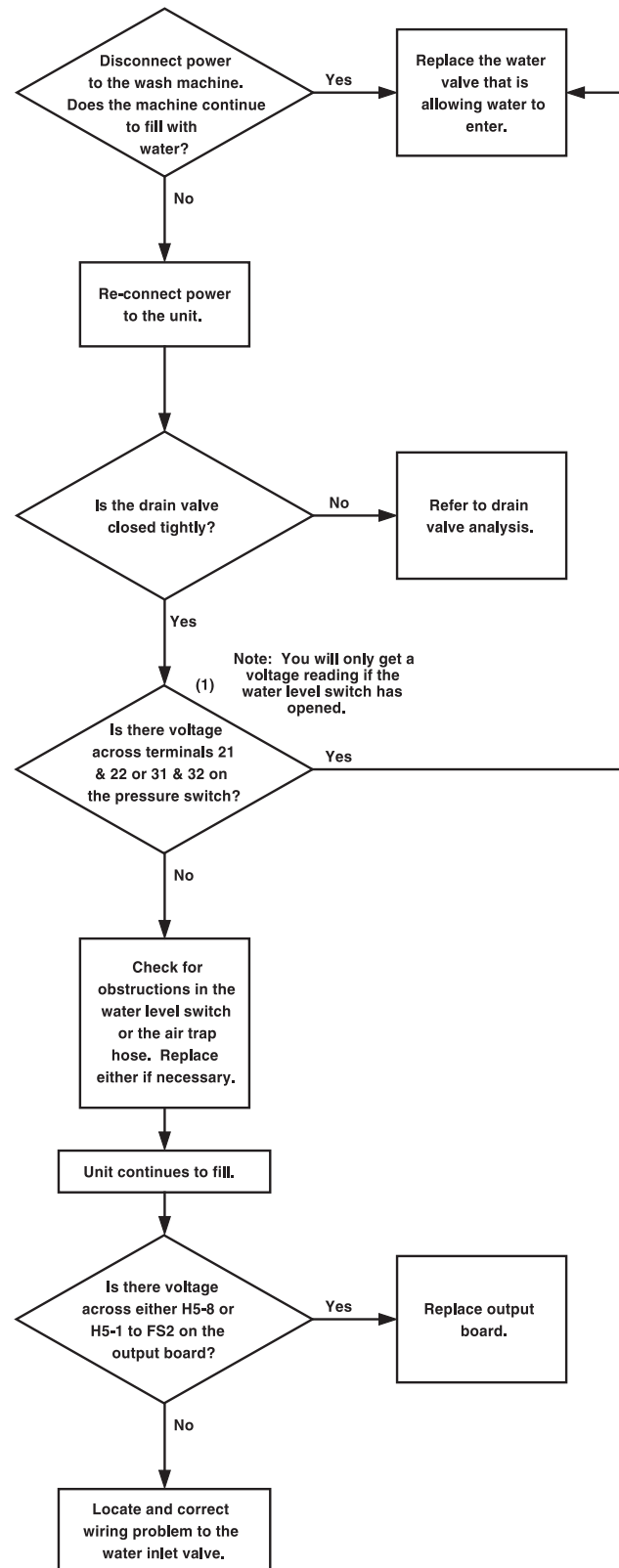
**NOTE: Refer to the wiring diagram supplied with your machine.**

# No Fill Analysis (Sheet 2 of 2)



CHM169S

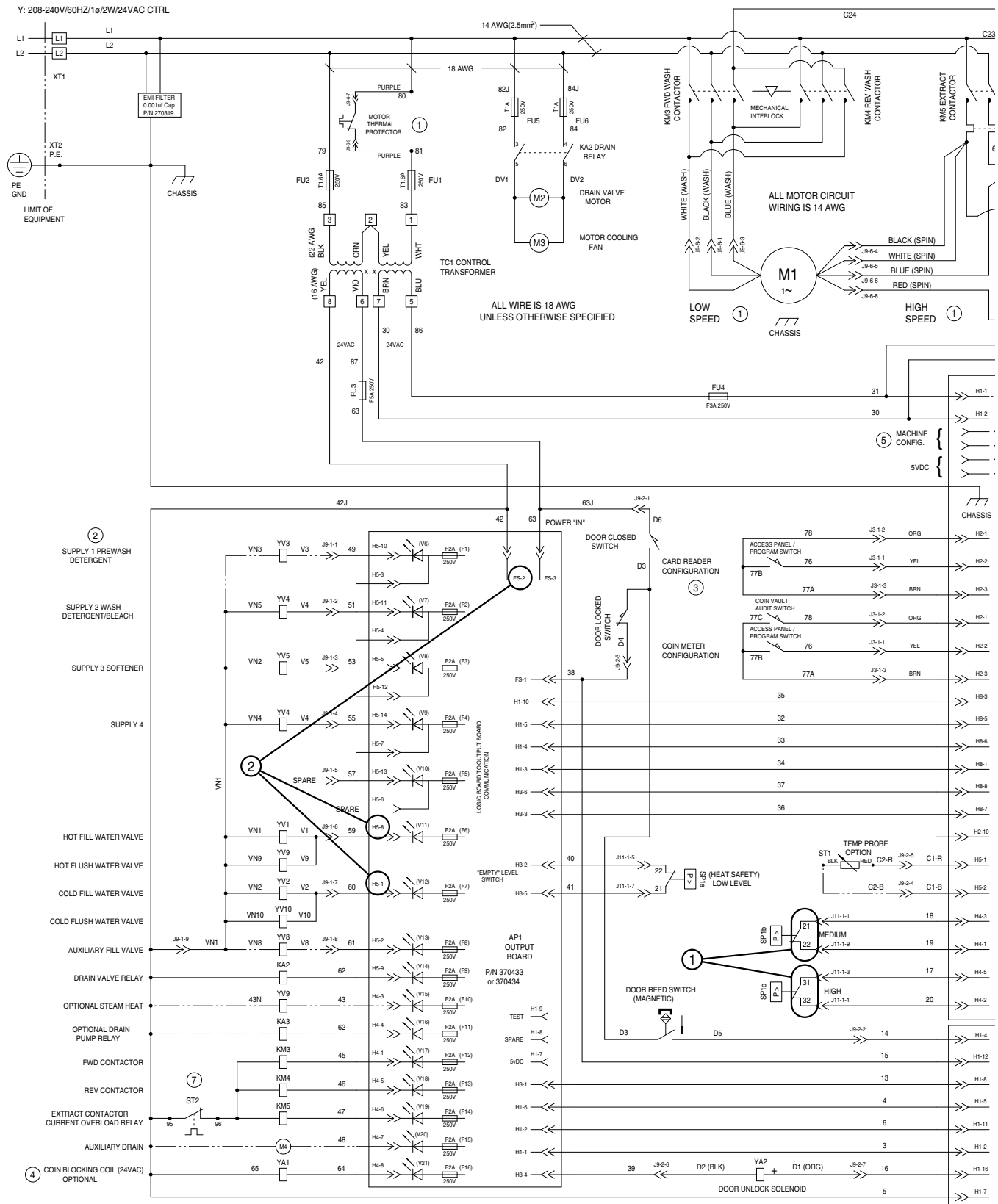
## 4. Over Flow Analysis



CHM170S

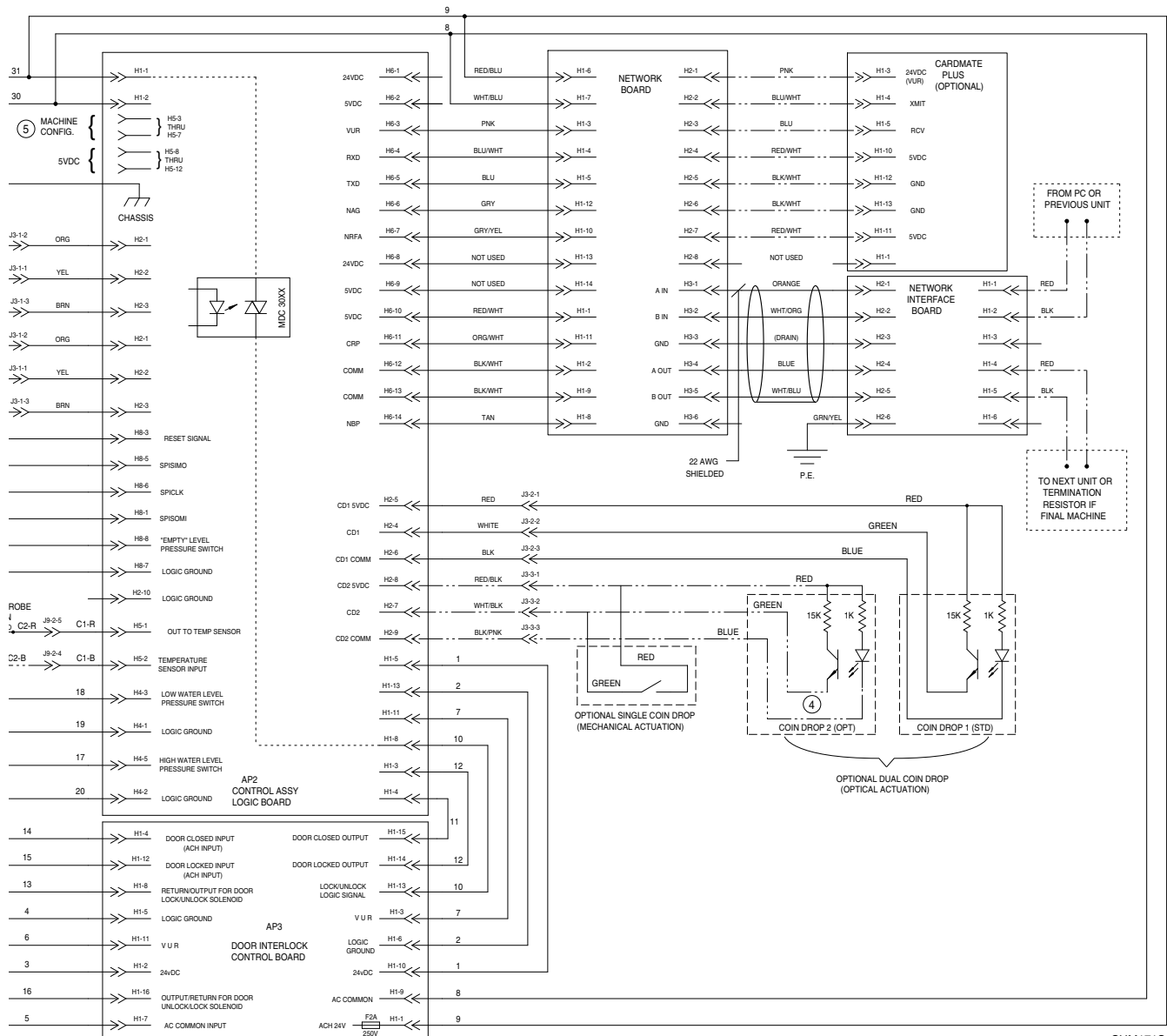
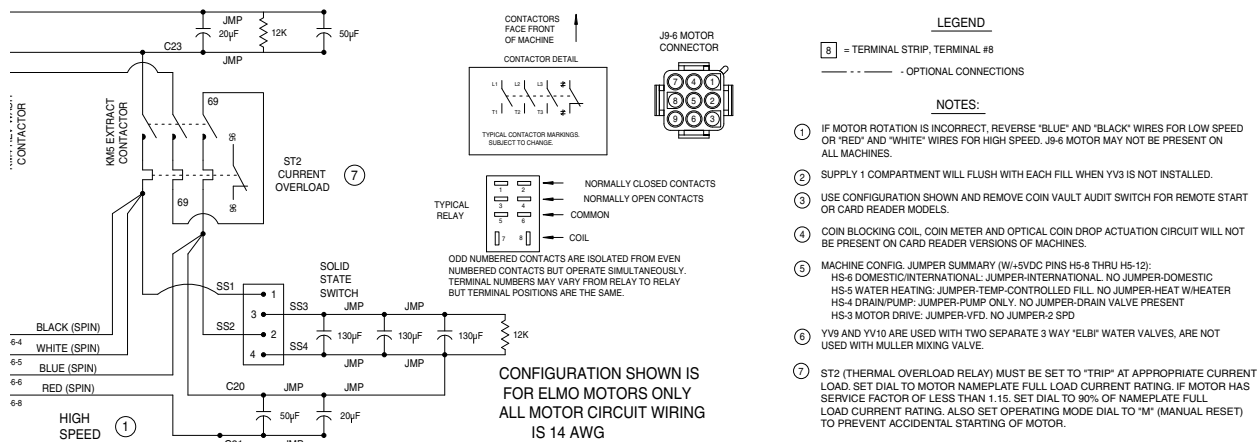
**Please see following 2 pages for wiring diagram information.**

## Over Flow Analysis (Sheet 1 of 2)



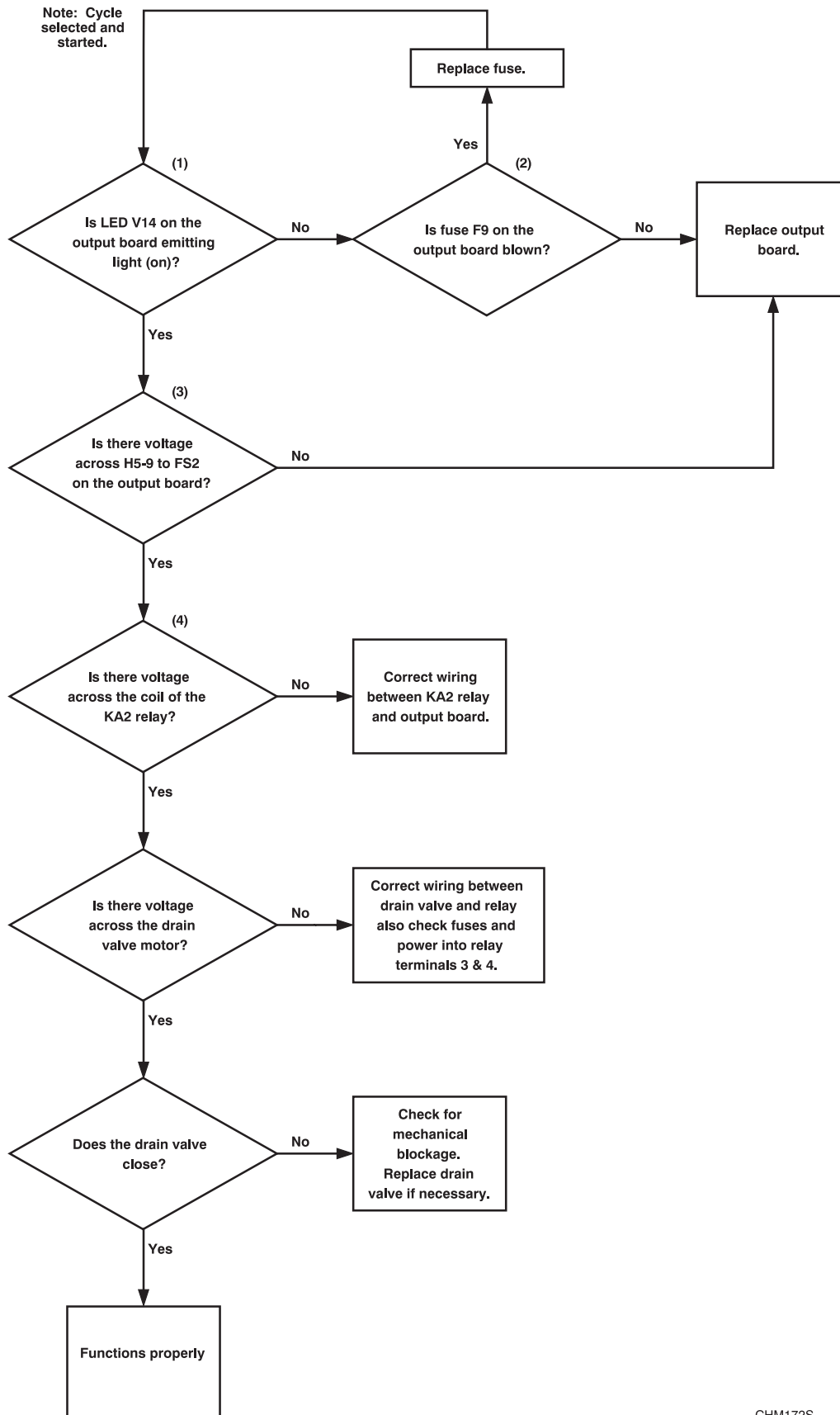
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Over Flow Analysis (Sheet 2 of 2)



CHM171S

## 5. Drain Valve Analysis

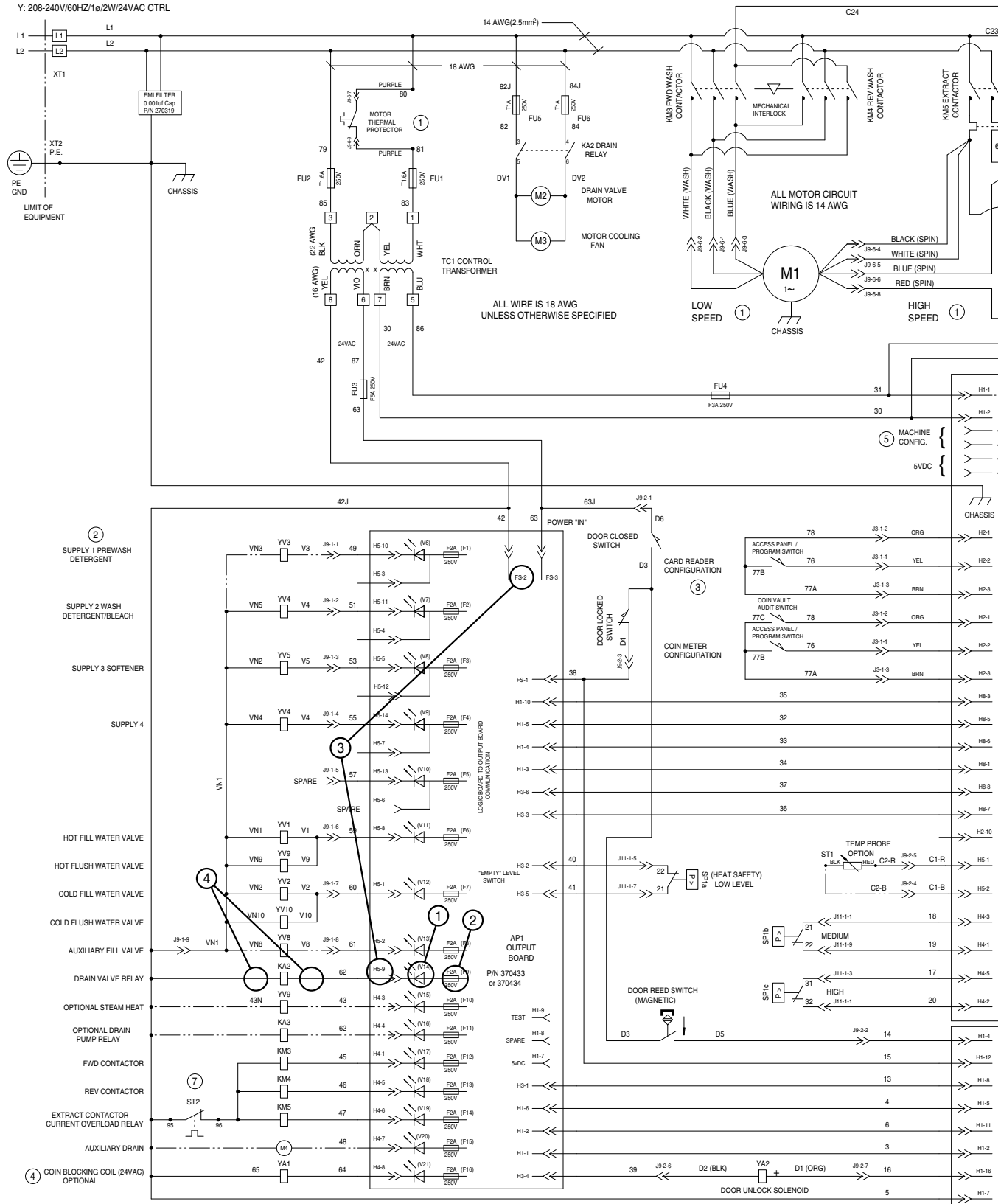


CHM172S

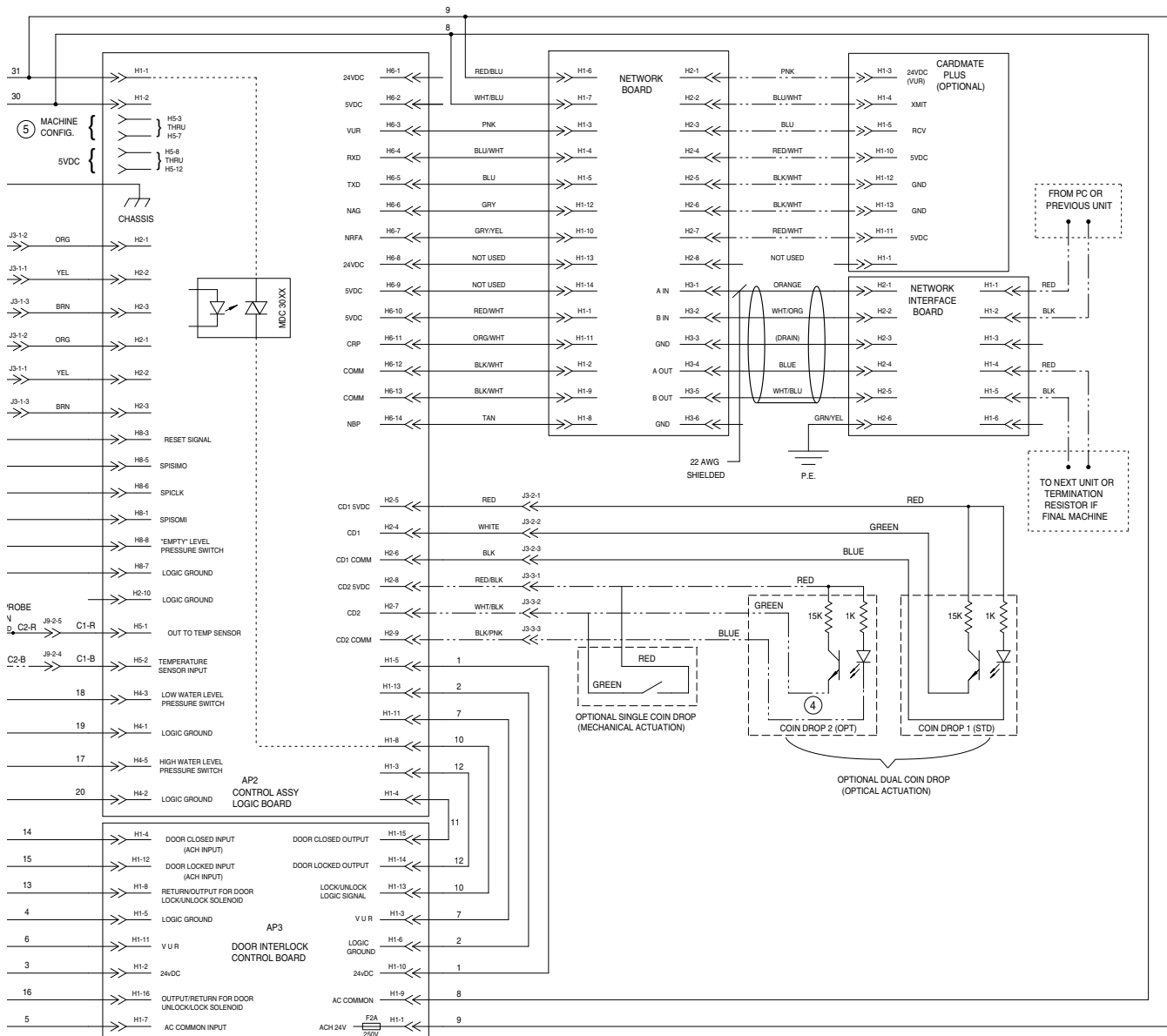
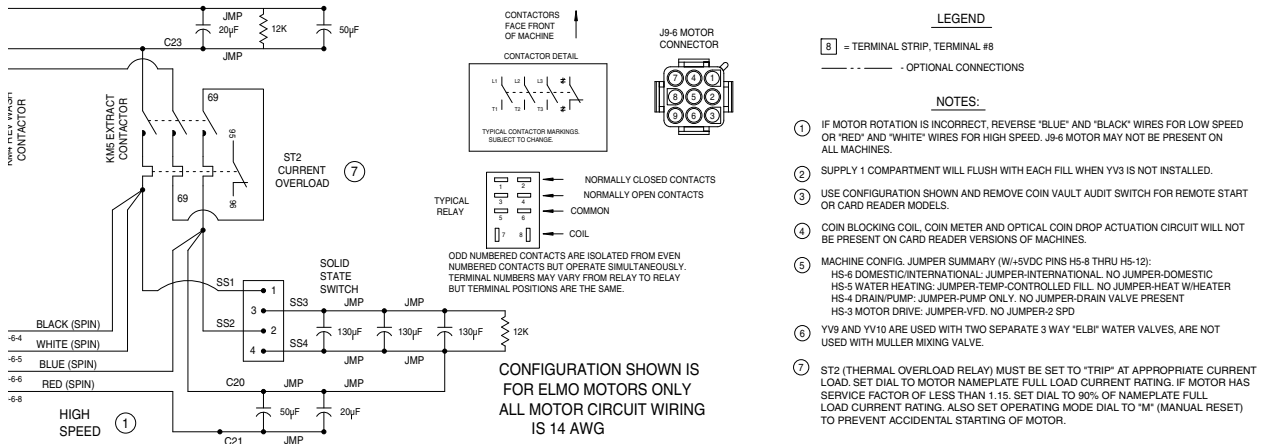


**Please see following 2 pages for wiring diagram information.**

# Drain Valve Analysis (Sheet 1 of 2)



# Drain Valve Analysis (Sheet 2 of 2)



CHM173S

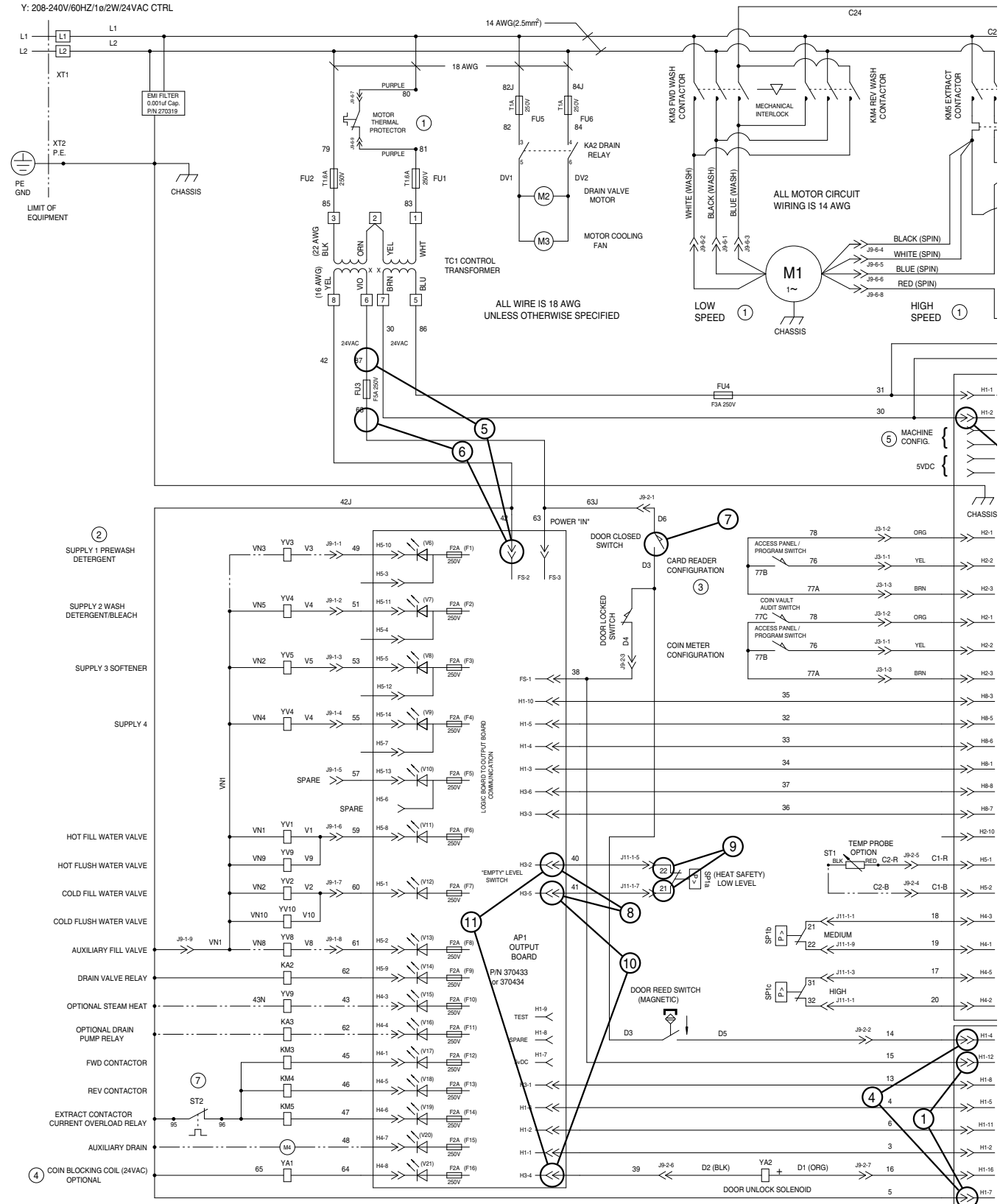
## 6. Door Lock Switch Analysis



CHM344S

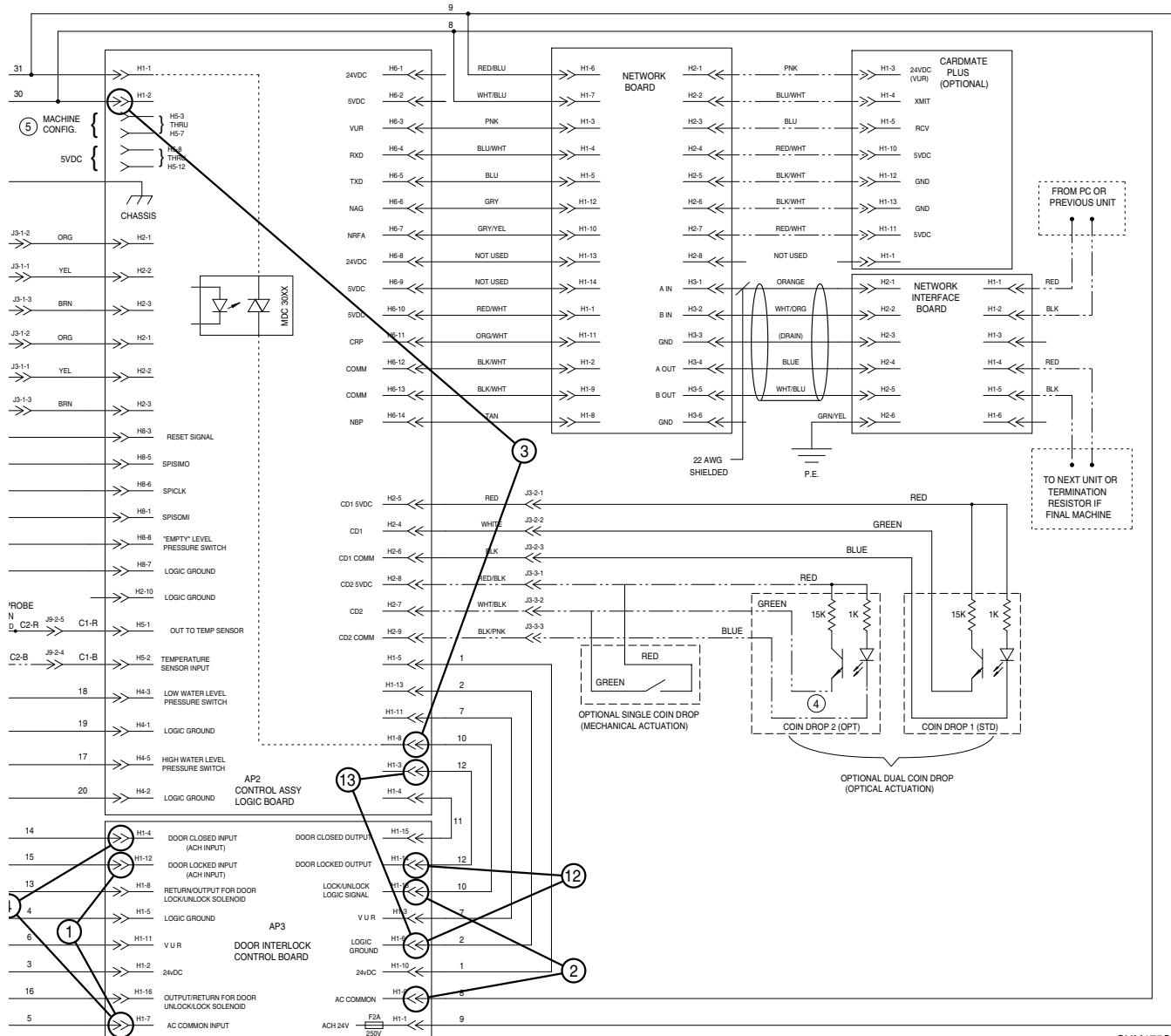
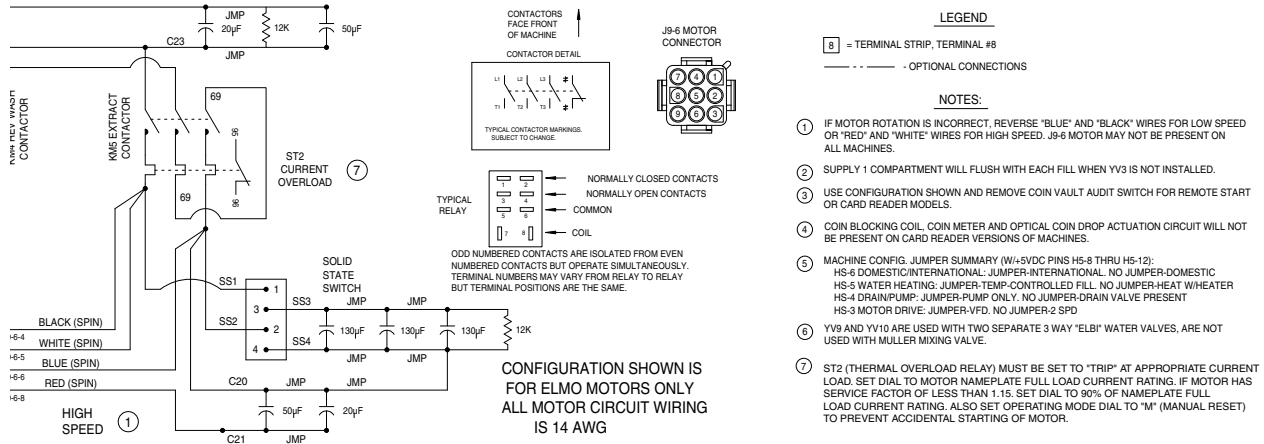
**Please see following 2 pages for wiring diagram information.**

# Door Lock Switch Analysis (Sheet 1 of 2)



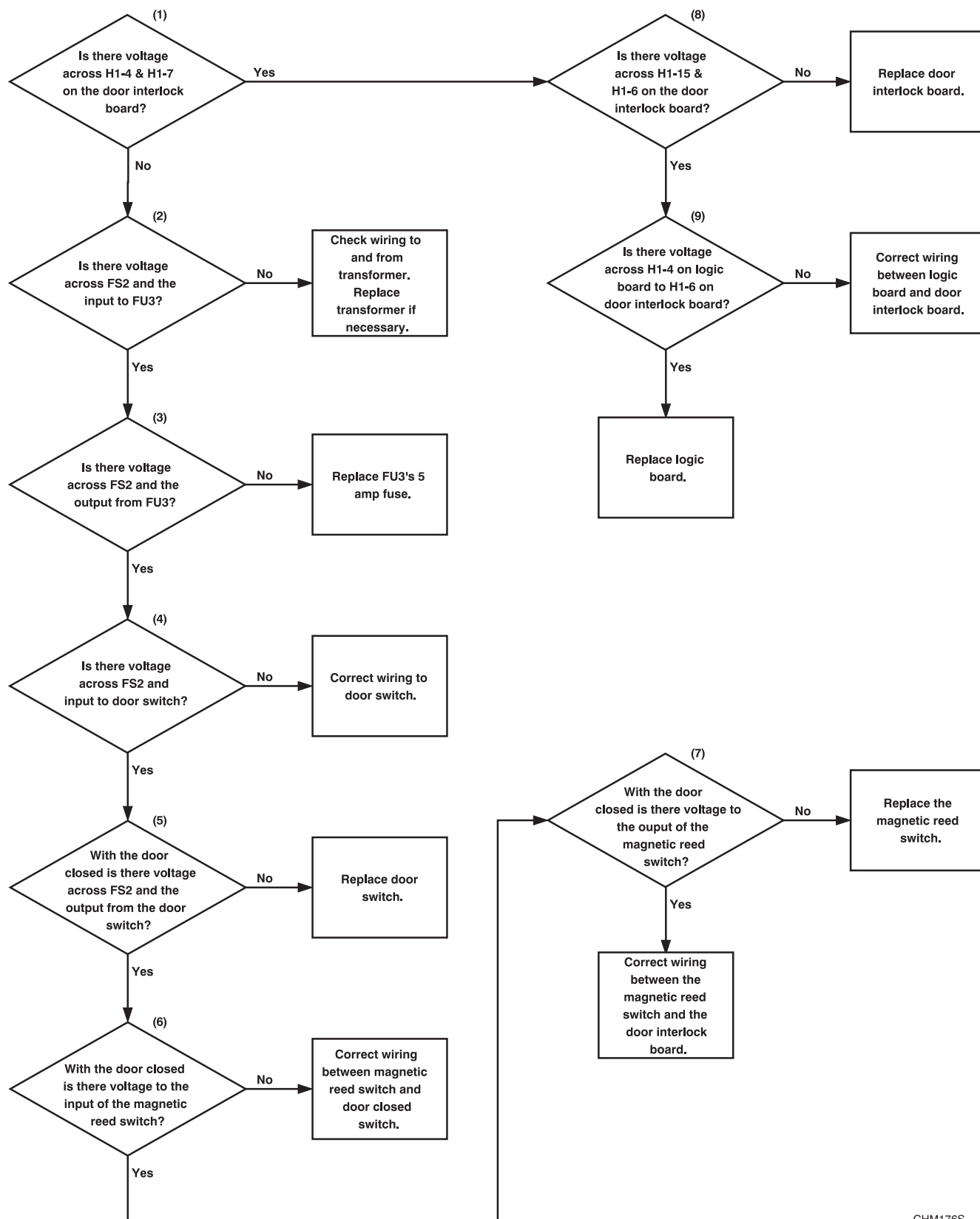
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Door Lock Switch Analysis (Sheet 2 of 2)



CHM175S

## 7. Door Switch Analysis



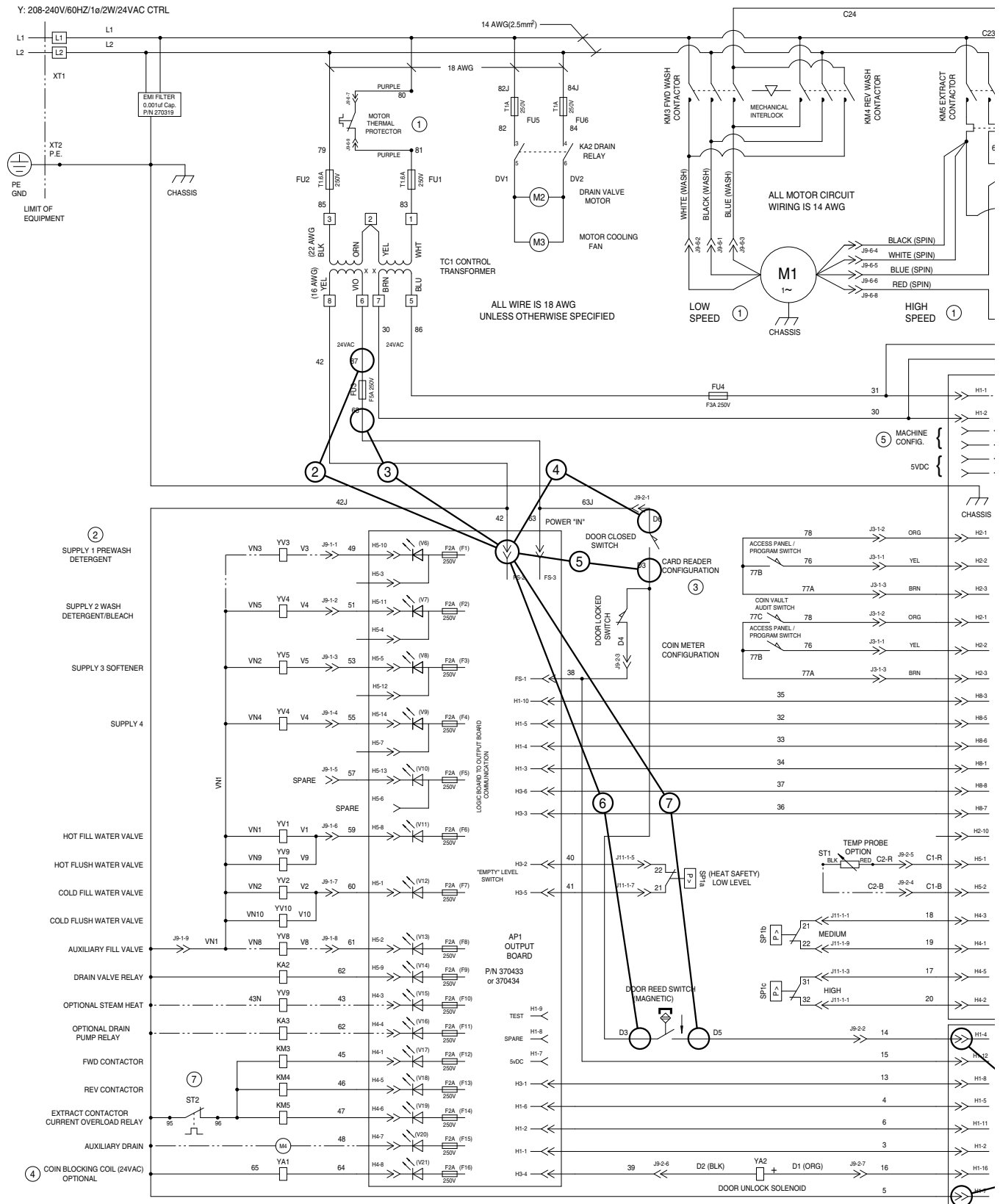
CHM176S



**Please see following 2 pages for wiring diagram information.**

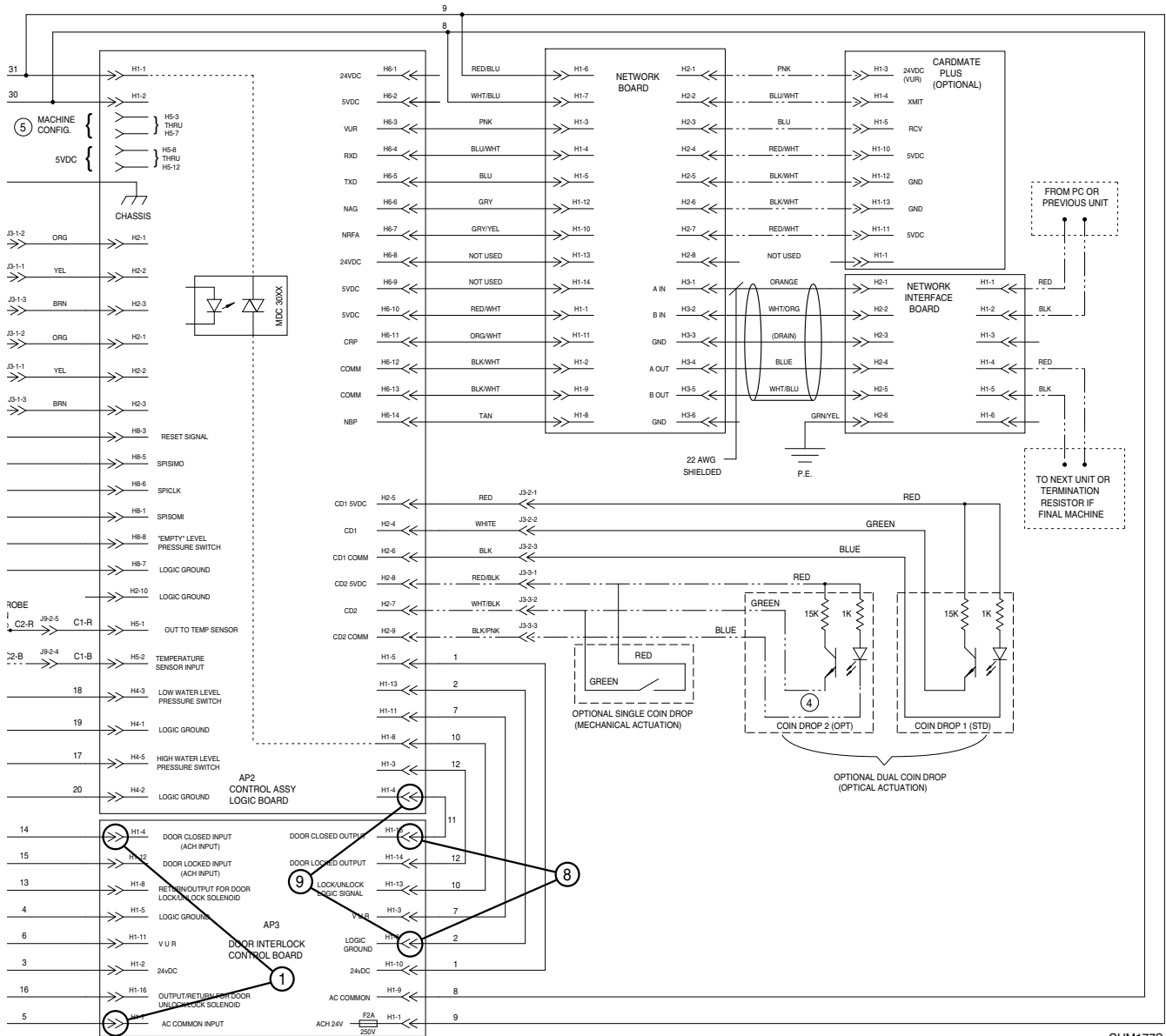
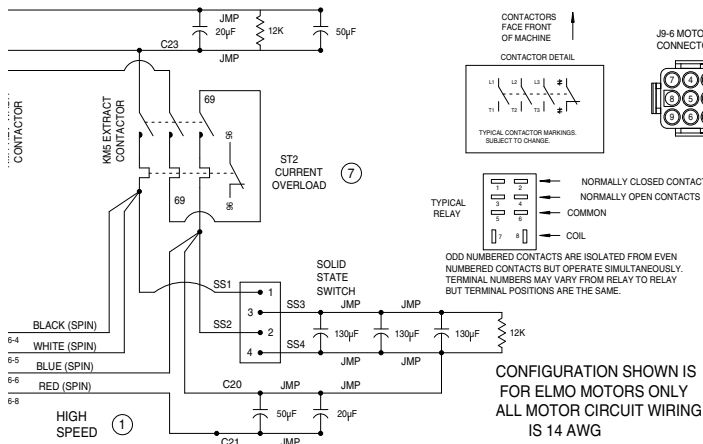
## Troubleshooting

## Door Switch Analysis (Sheet 1 of 2)

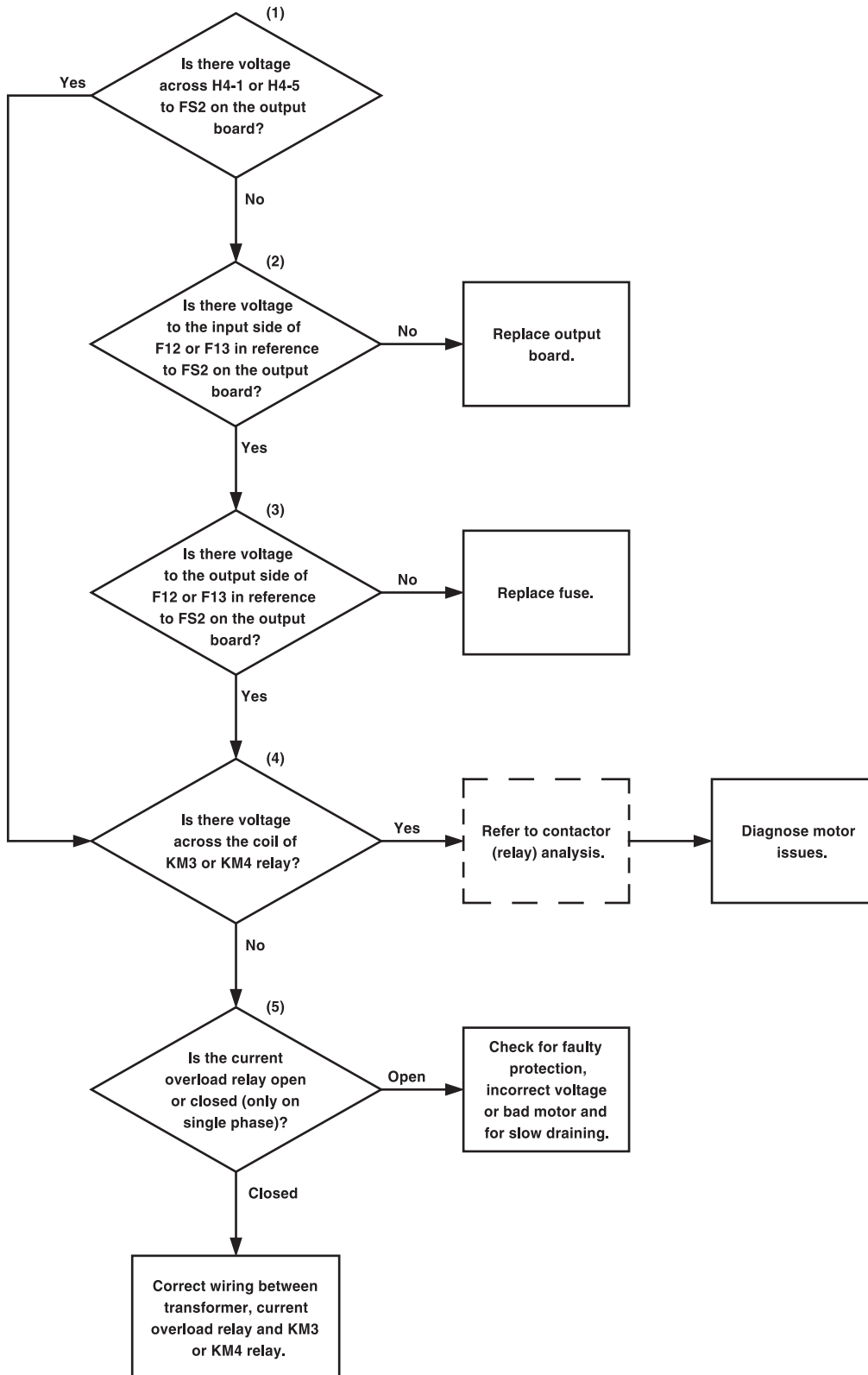


**NOTE: Refer to the wiring diagram supplied with your machine.**

# Door Switch Analysis (Sheet 2 of 2)



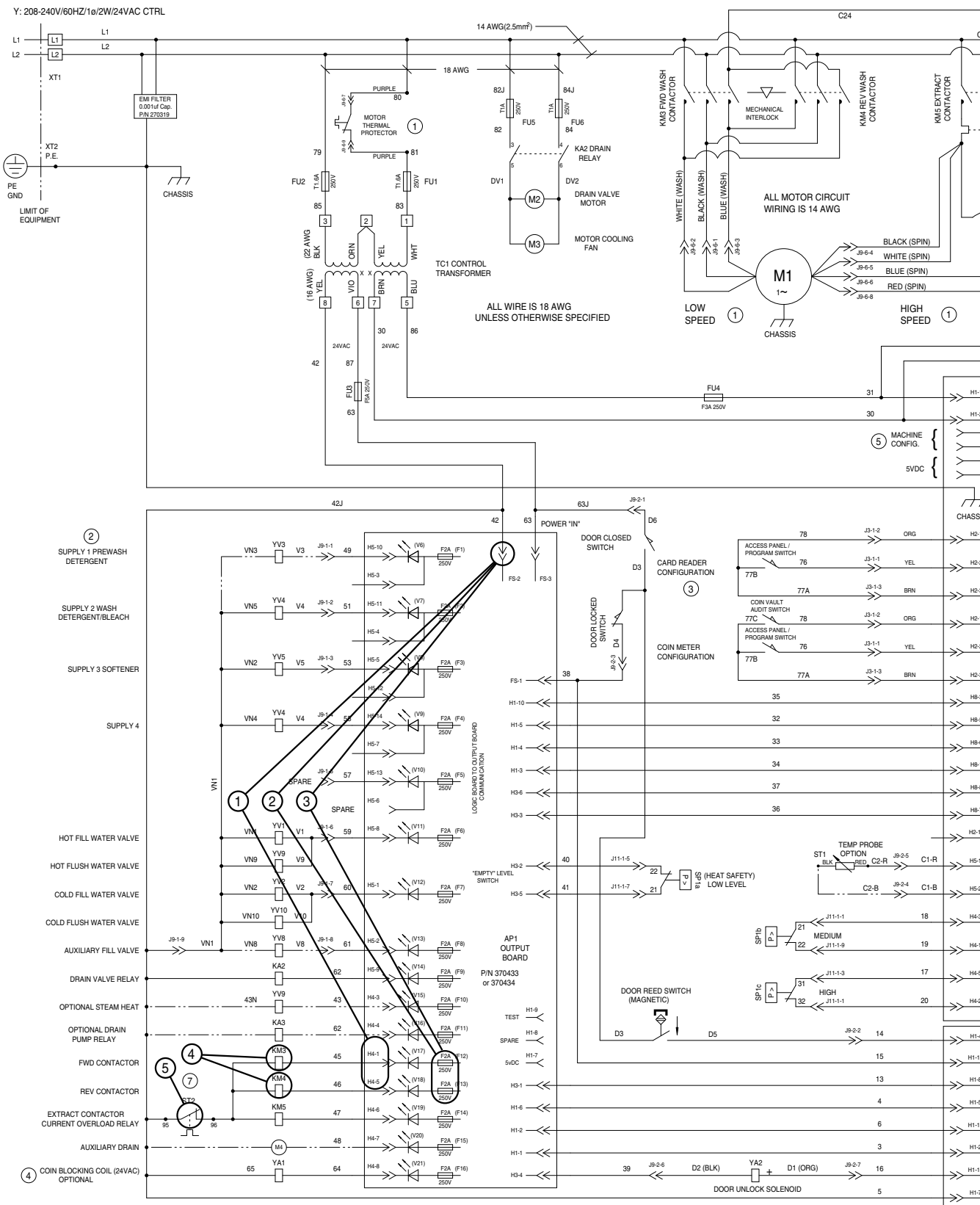
## 8. Agitation Analysis



CHM178S

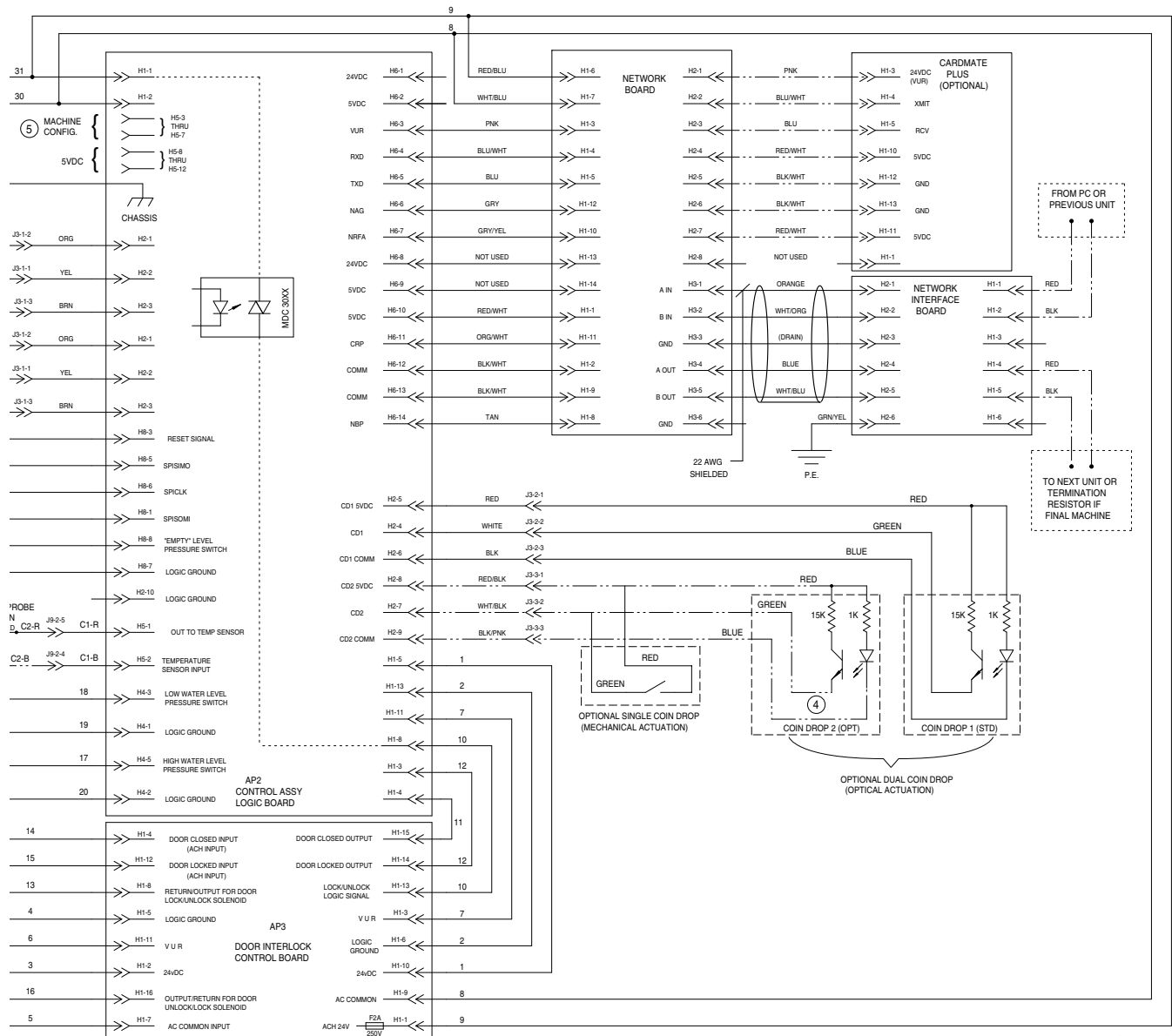
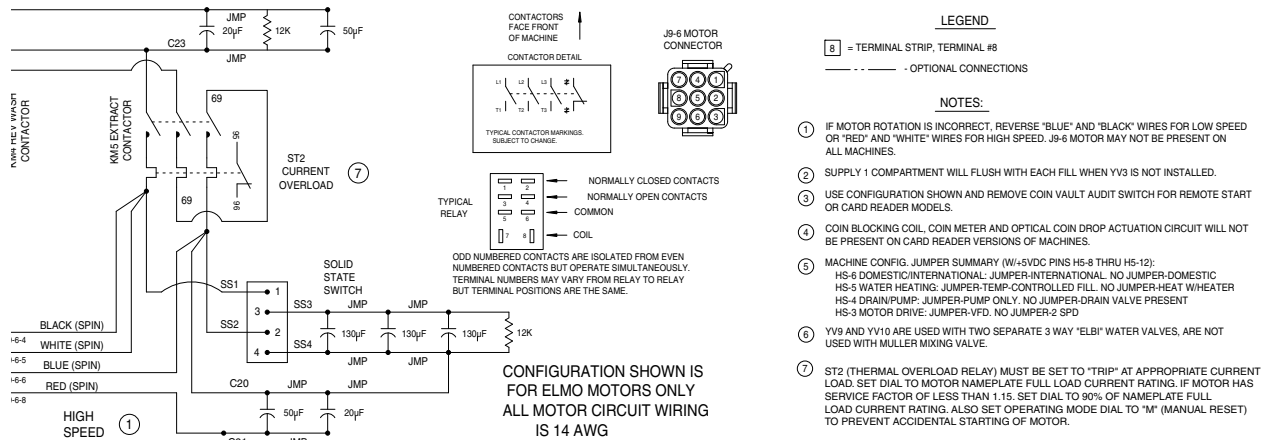
**Please see following 2 pages for wiring diagram information.**

## Agitation Analysis (Sheet 1 of 2)



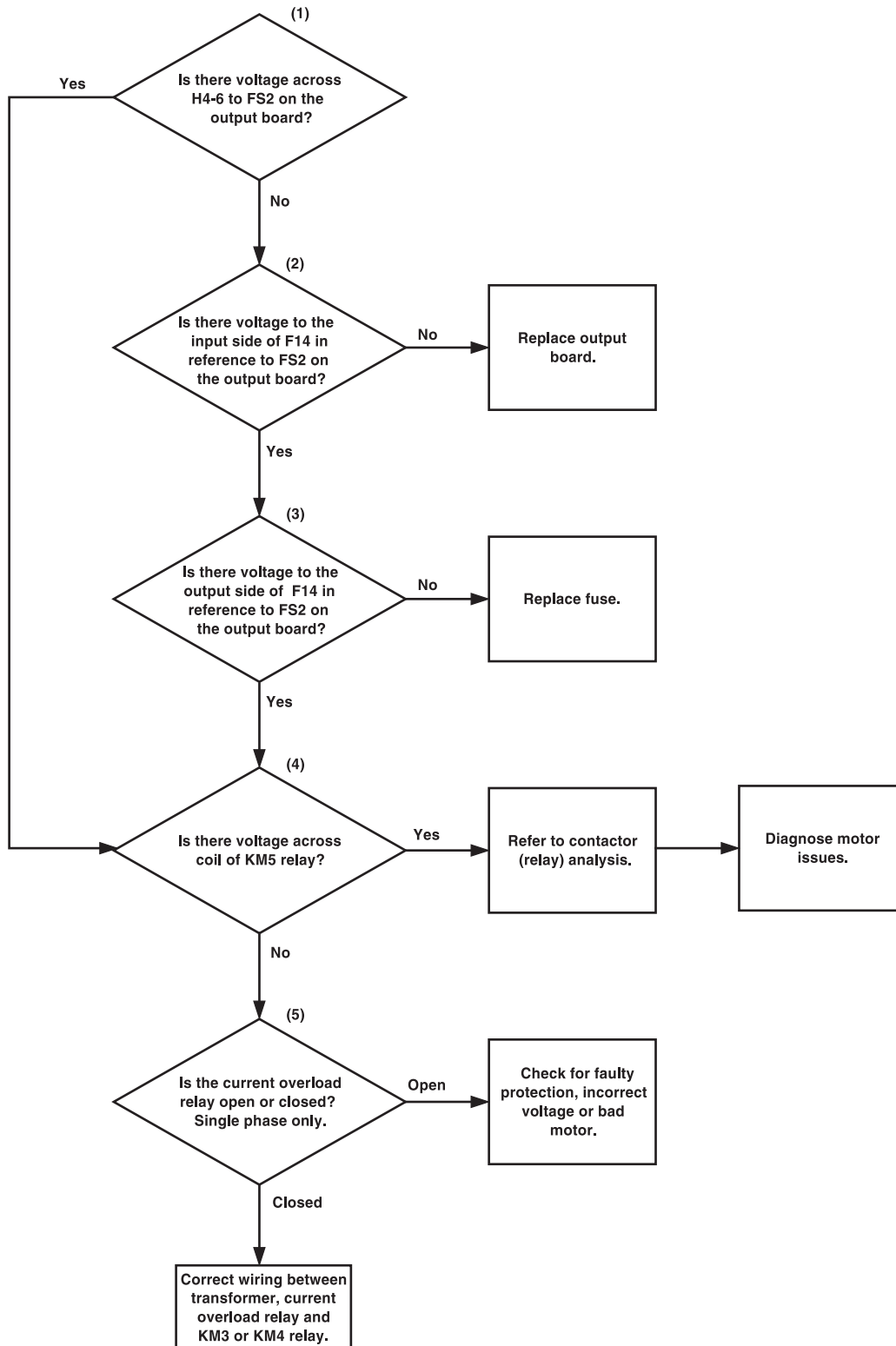
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Agitation Analysis (Sheet 2 of 2)



CHM179S

## 9. Spin Analysis

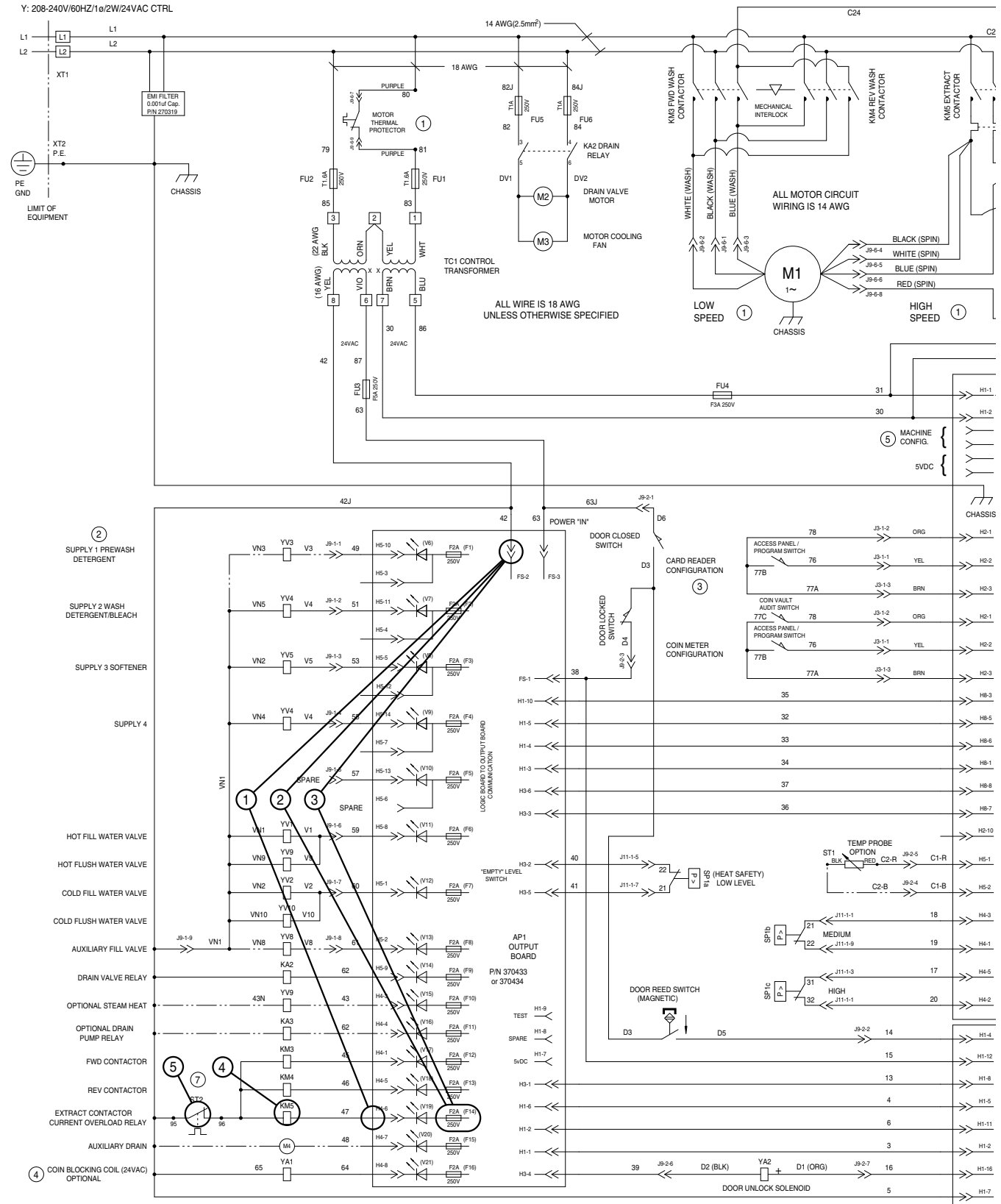


CHM181S



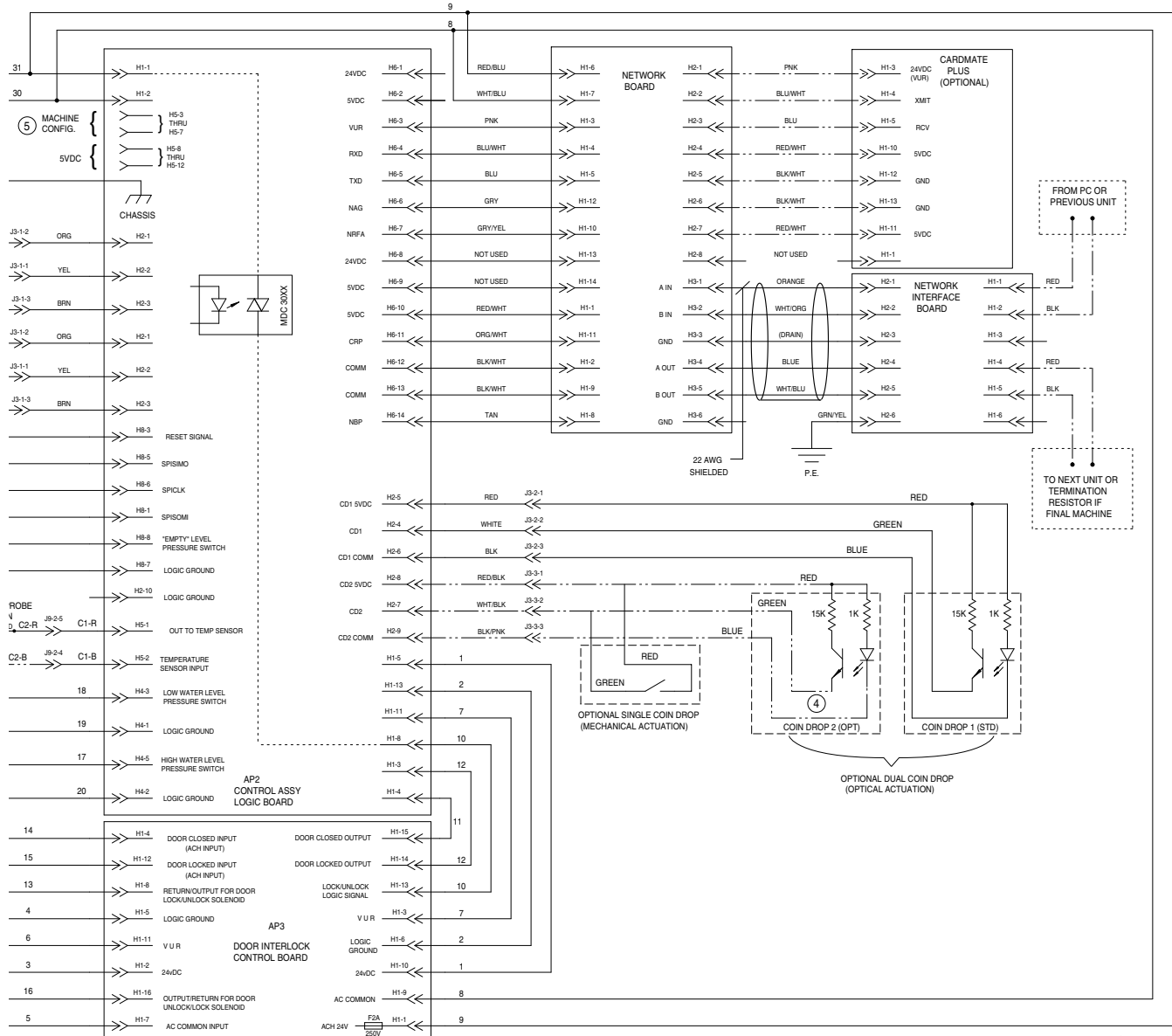
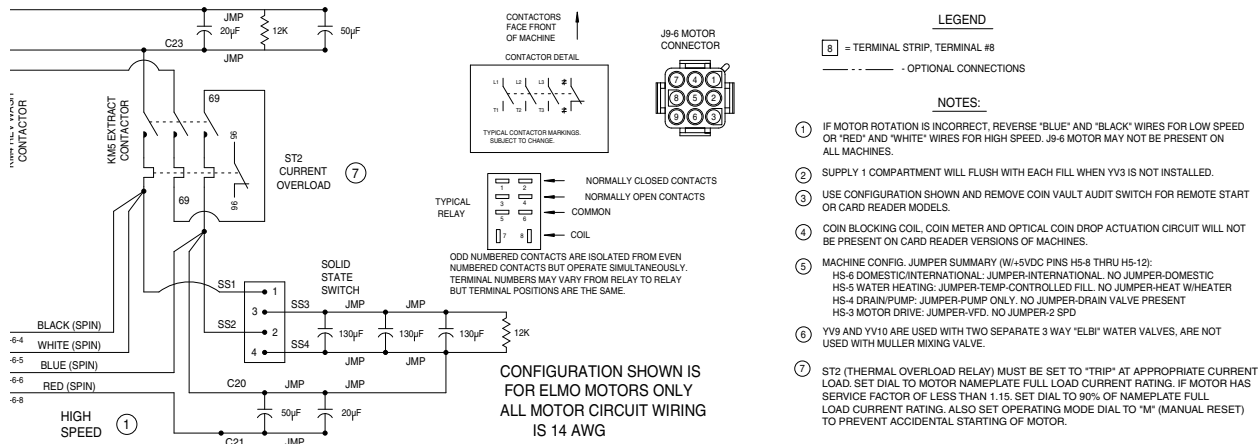
**Please see following 2 pages for wiring diagram information.**

## Spin Analysis (Sheet 1 of 2)



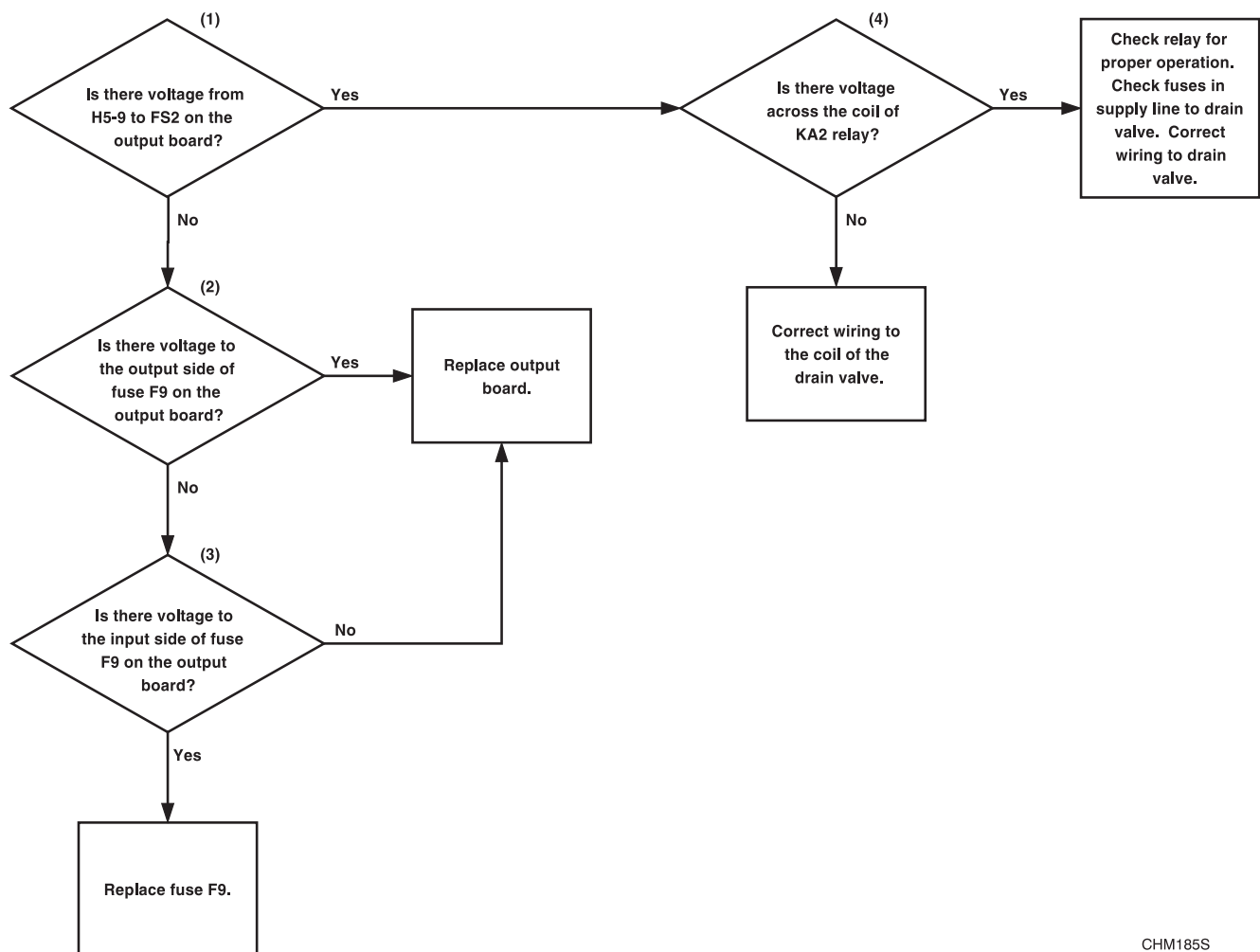
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Spin Analysis (Sheet 2 of 2)



CHM1835

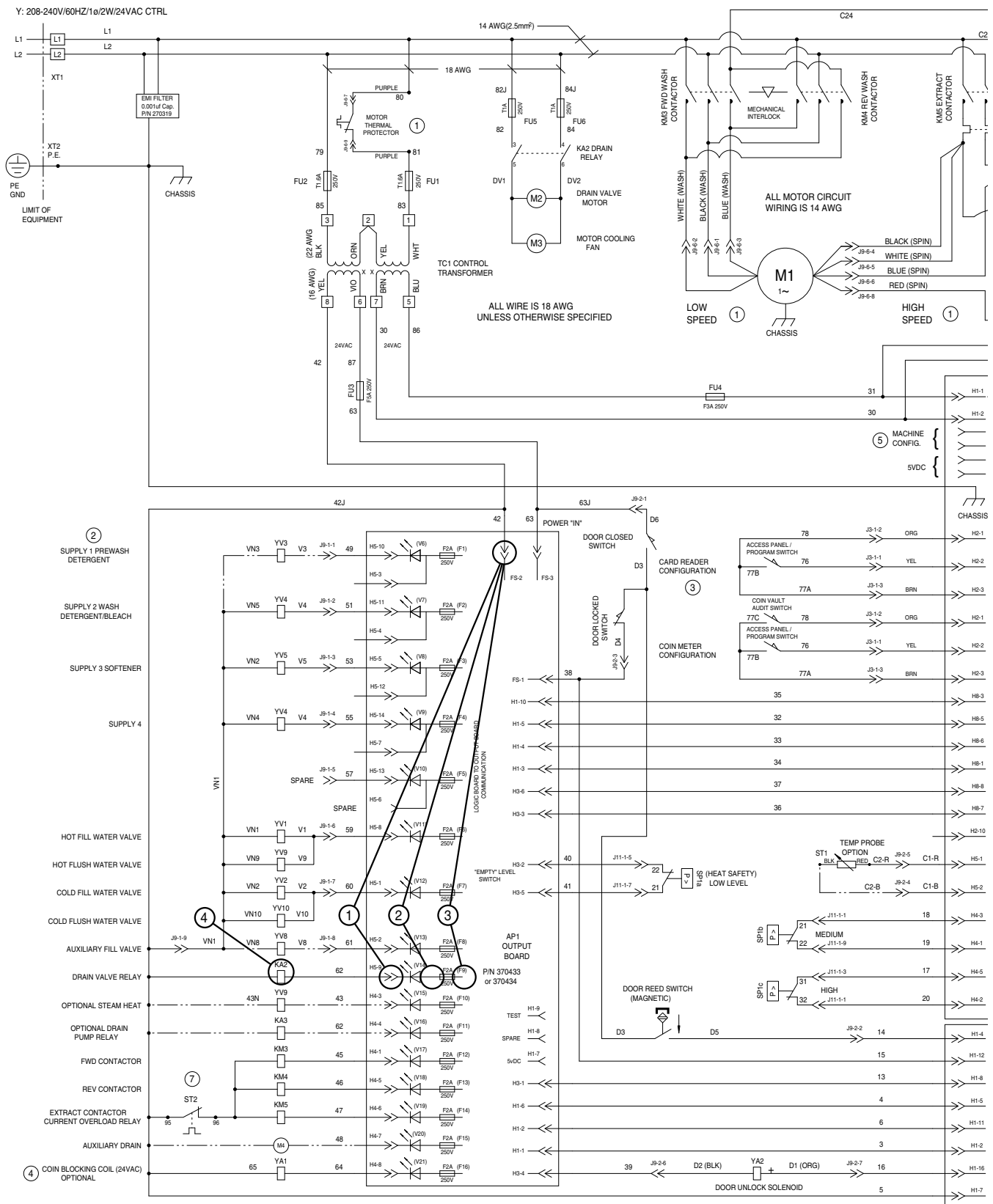
## 10. Drain Analysis



CHM185S

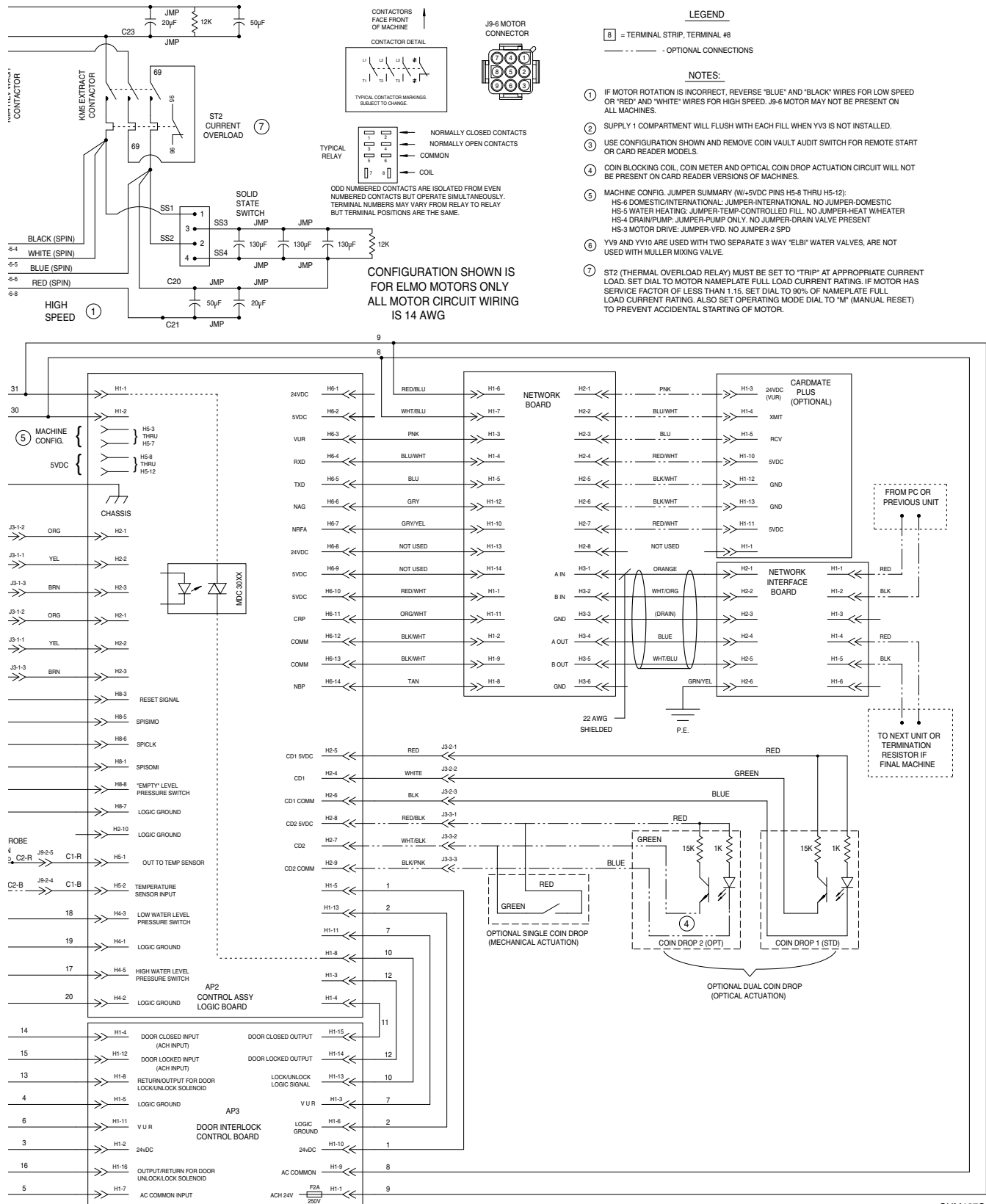
**Please see following 2 pages for wiring diagram information.**

## Drain Analysis (Sheet 1 of 2)

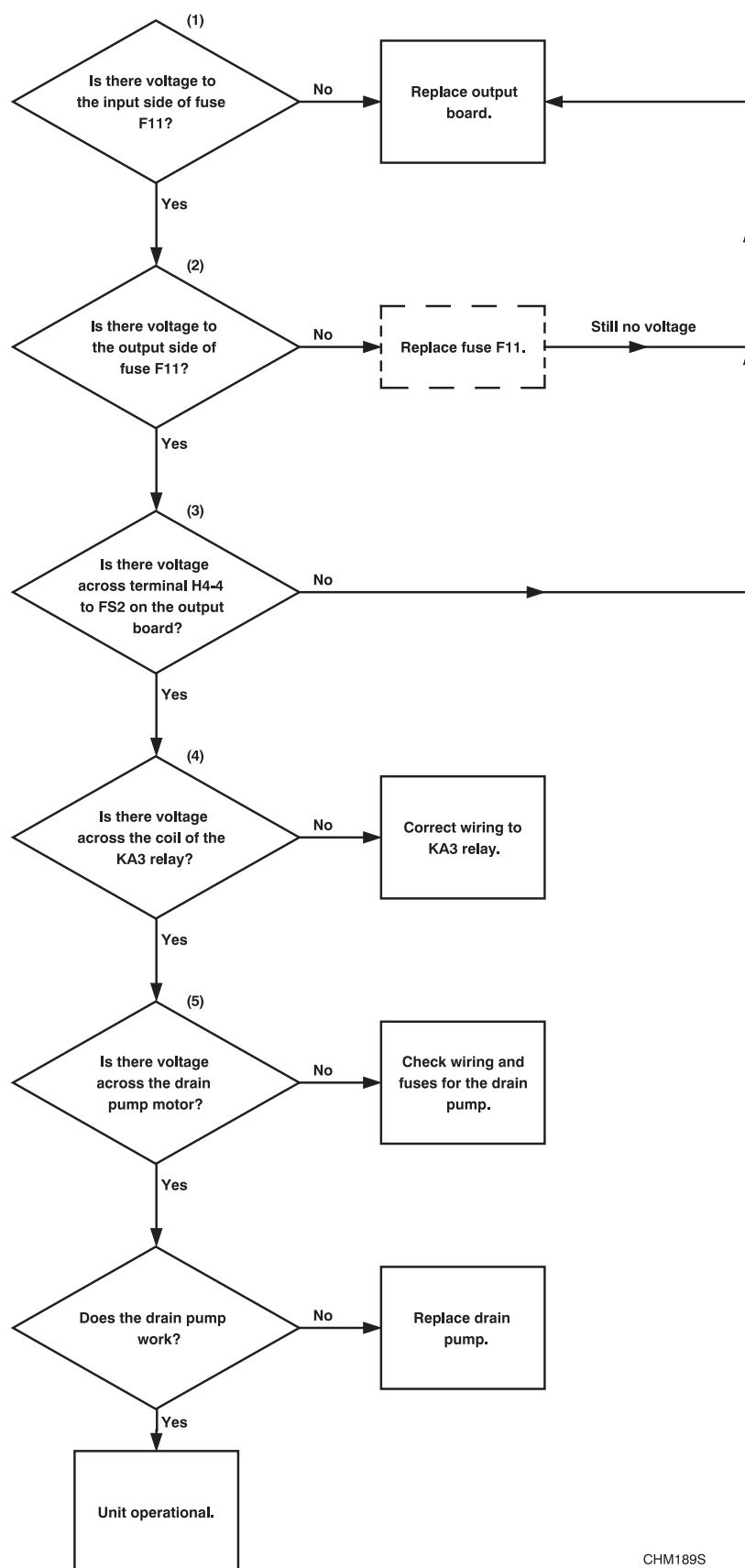


**NOTE: Refer to the wiring diagram supplied with your machine.**

# Drain Analysis (Sheet 2 of 2)



## 11. Optional Drain Pump Analysis

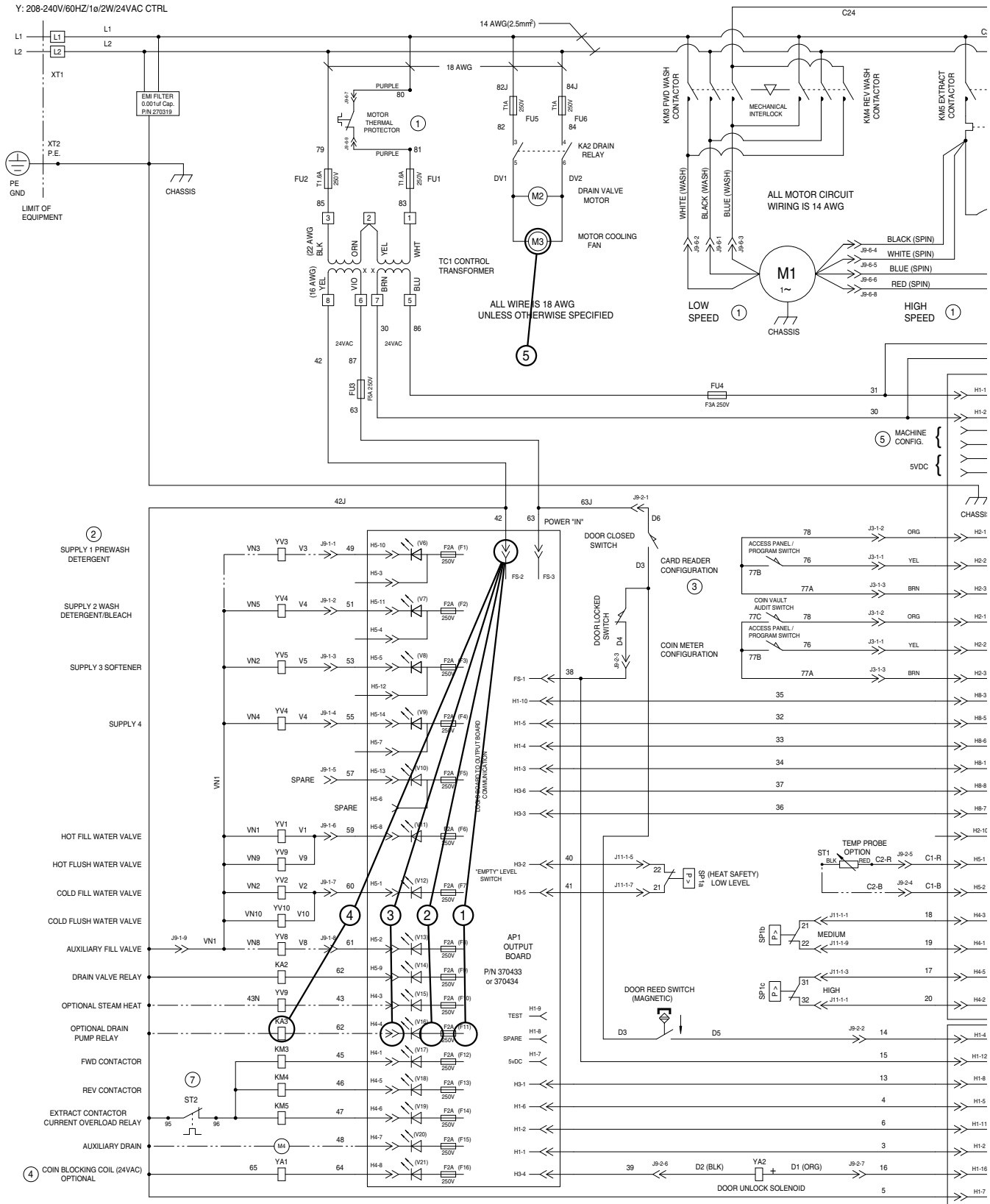


CHM189S



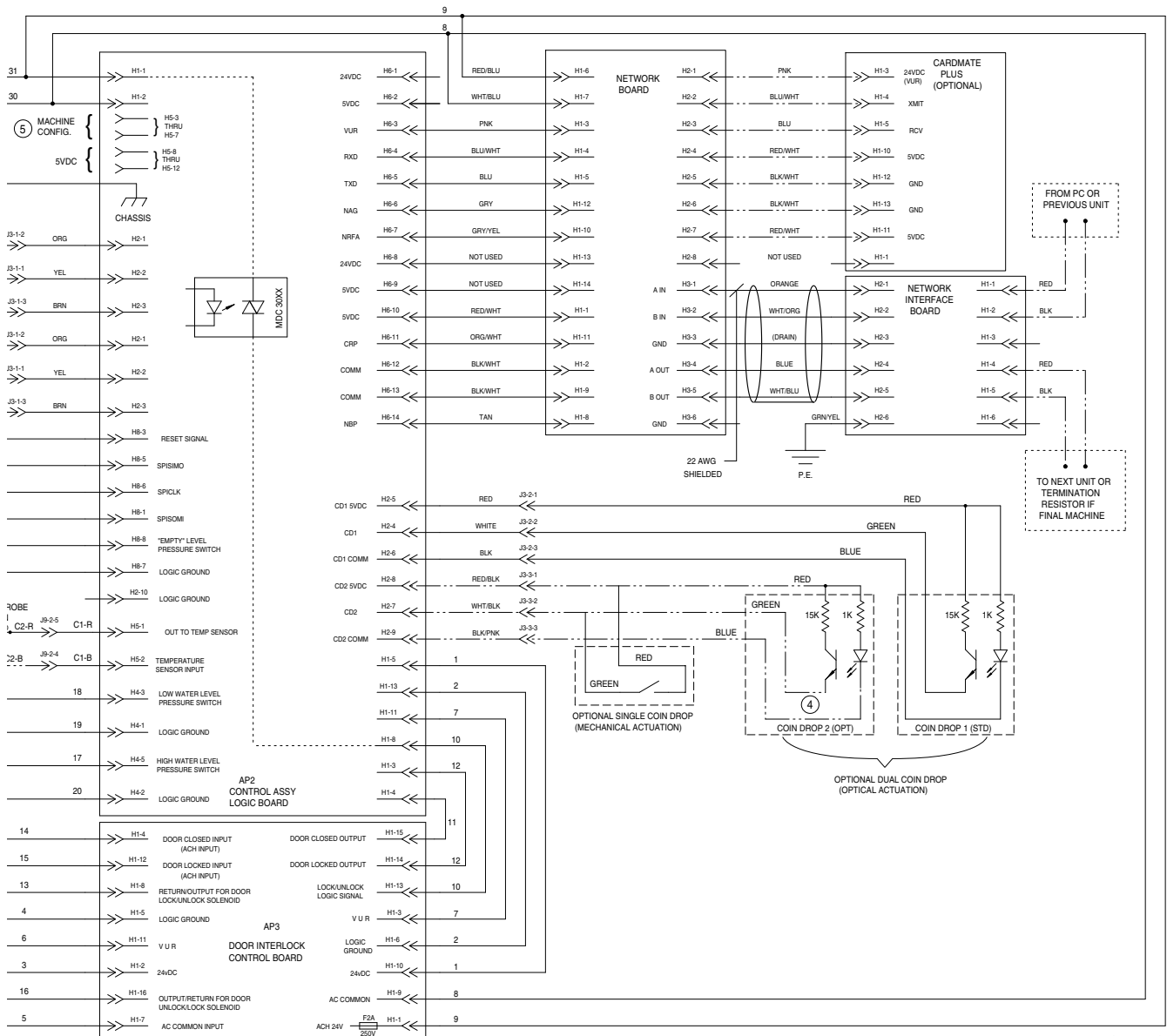
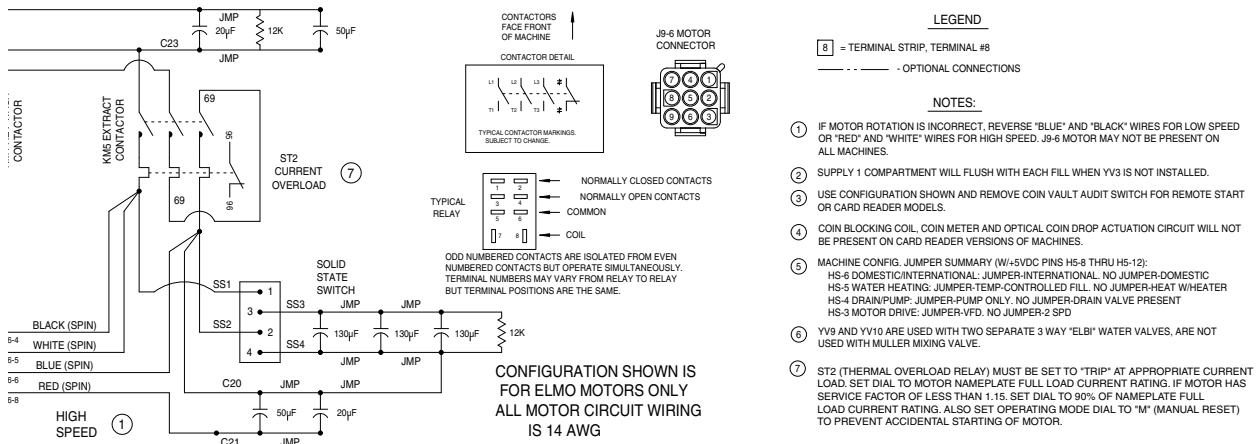
**Please see following 2 pages for wiring diagram information.**

# Optional Drain Pump Analysis (Sheet 1 of 2)



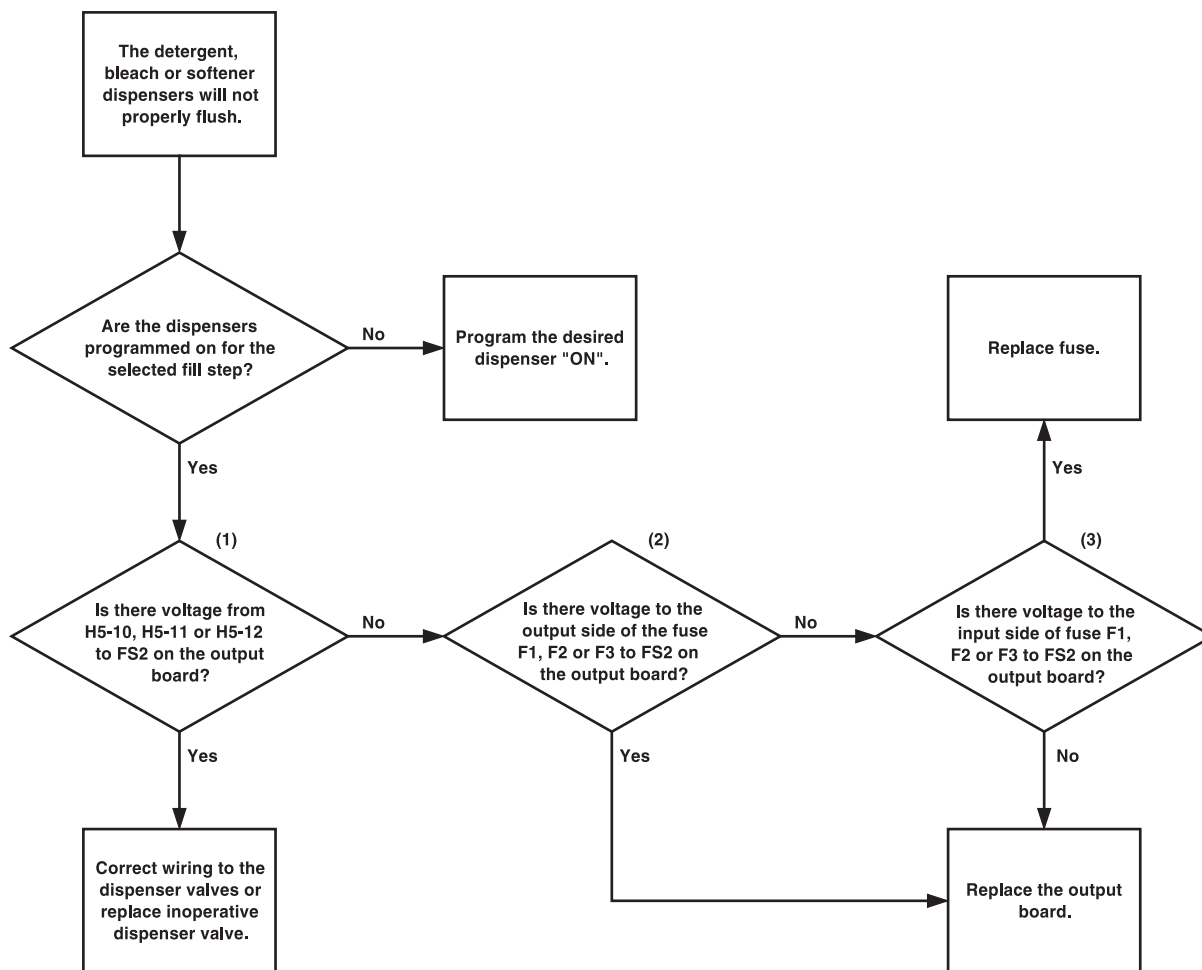
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Optional Drain Pump Analysis (Sheet 2 of 2)



CHM191S

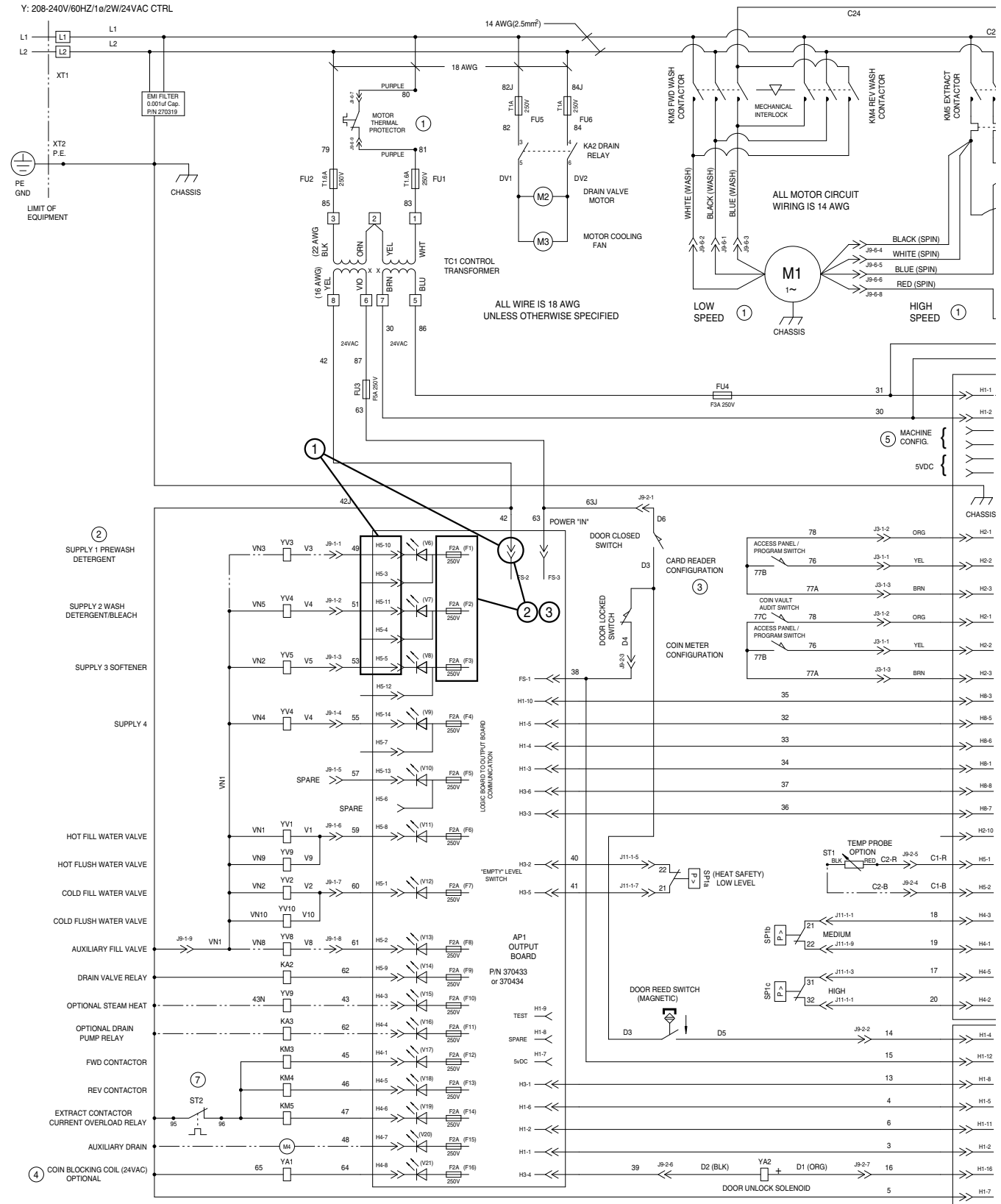
## 12. Dispenser Flush Analysis



CHM193S

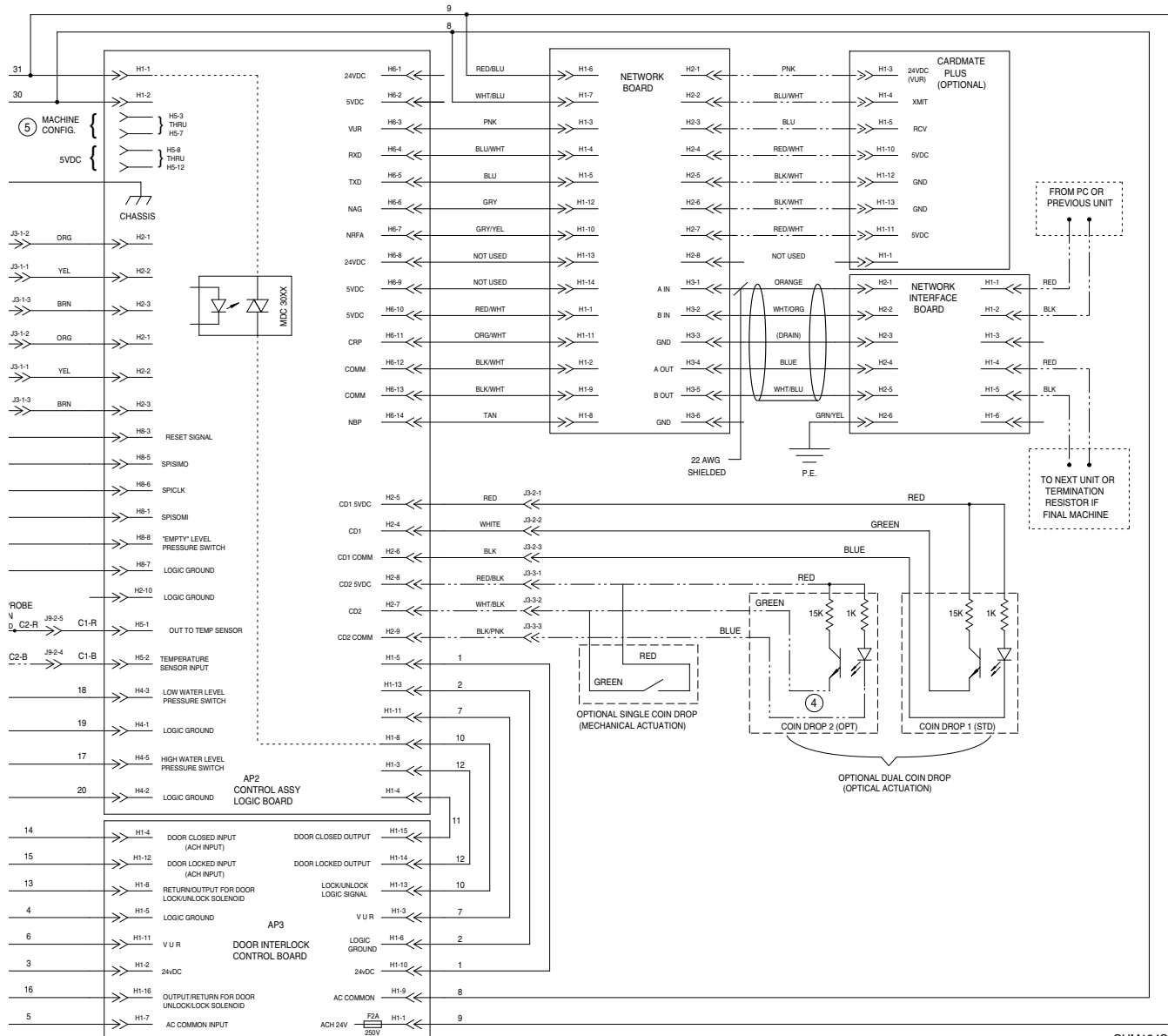
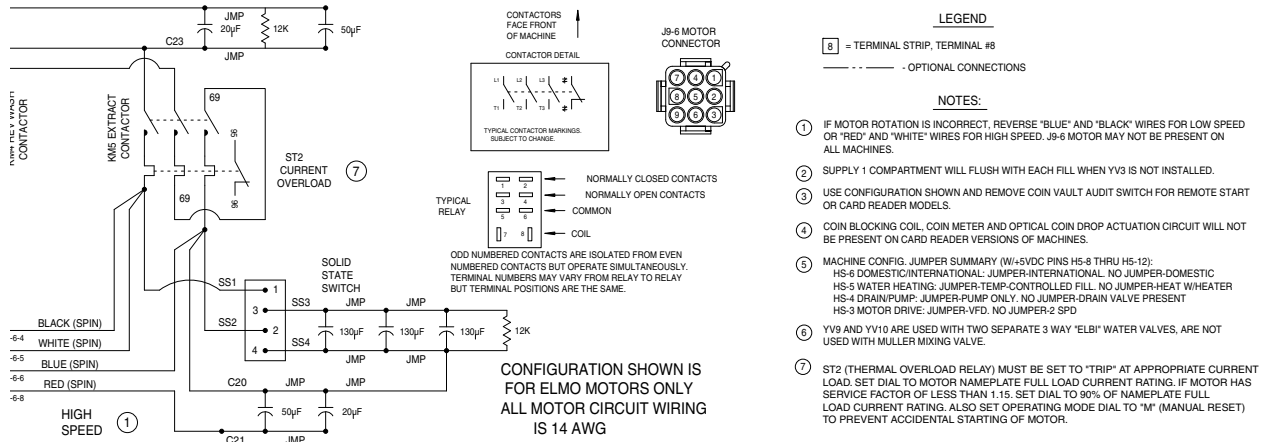
**Please see following 2 pages for wiring diagram information.**

## Dispenser Flush Analysis (Sheet 1 of 2)



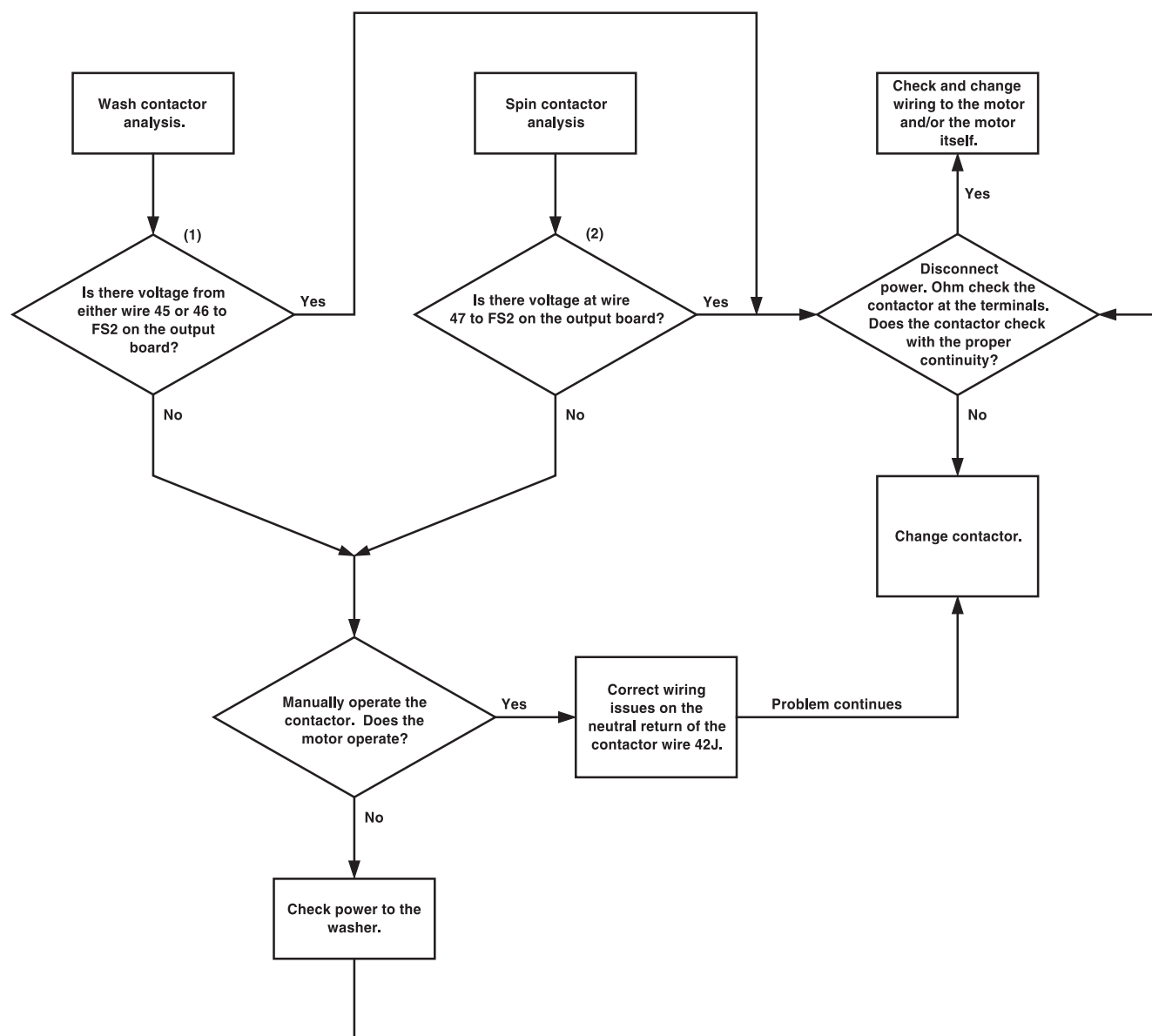
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Dispenser Flush Analysis (Sheet 2 of 2)



CHM1945

# 13. Contactor Analysis (Wash and Spin)

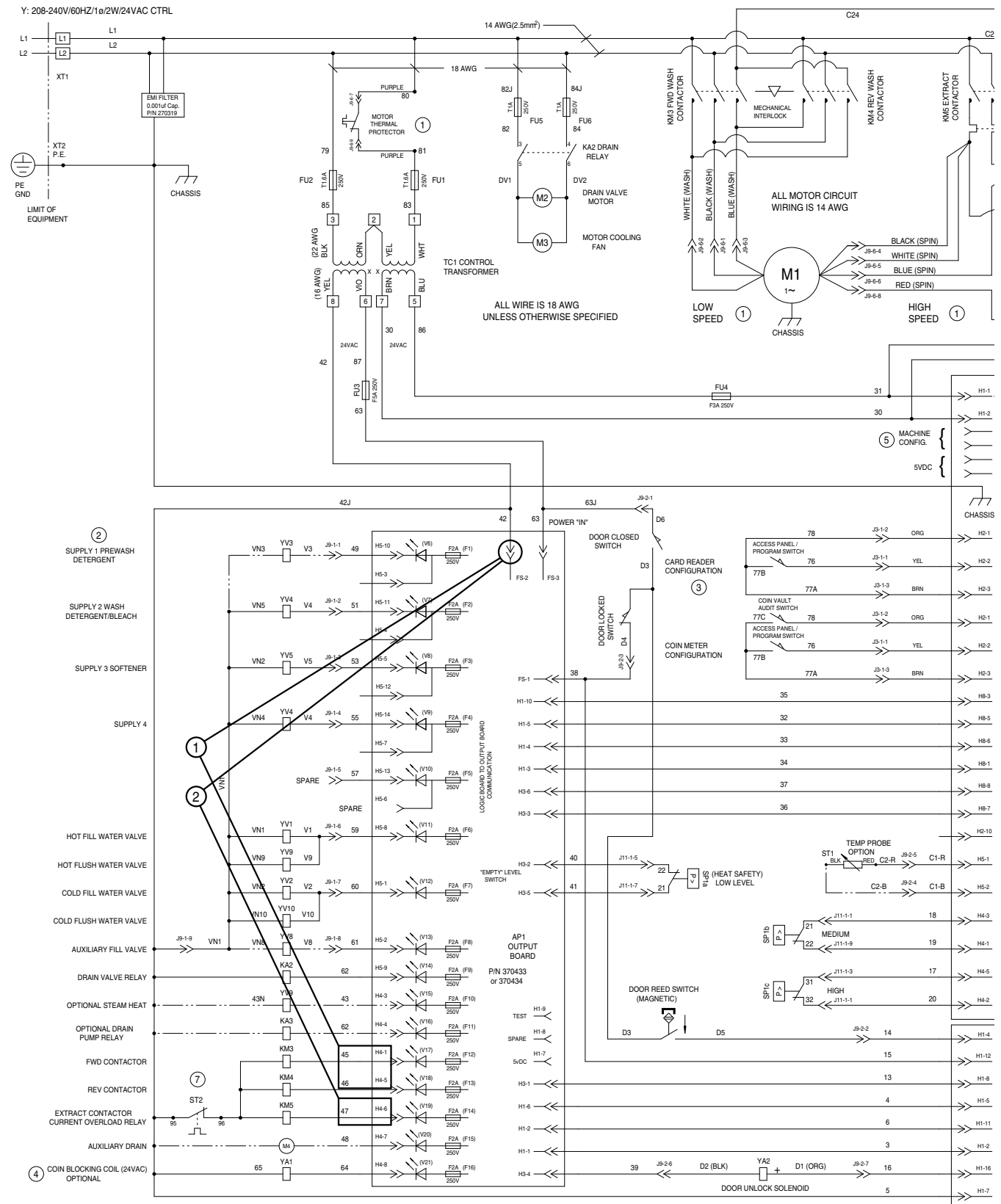


CHM196S



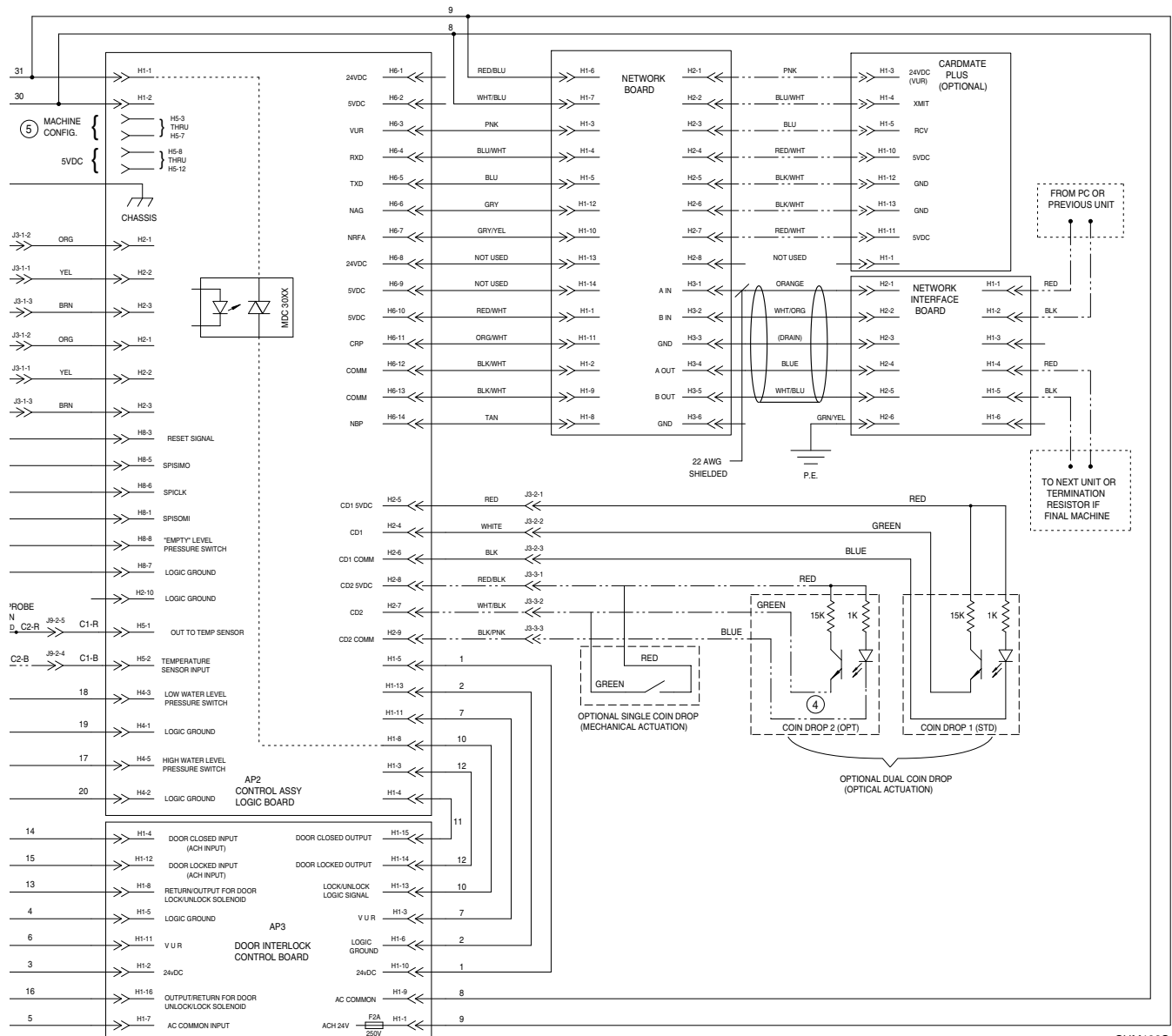
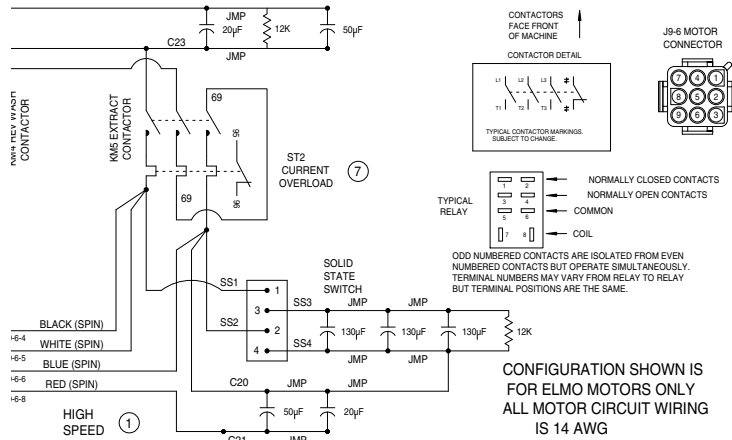
**Please see following 2 pages for wiring diagram information.**

# Contactor Analysis (Wash and Spin) (Sheet 1 of 2)



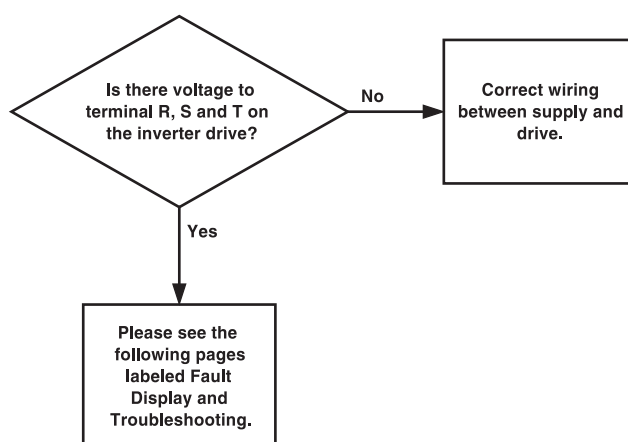
**NOTE: Refer to the wiring diagram supplied with your machine.**

# Contactor Analysis (Wash and Spin) (Sheet 2 of 2)



CHM198S

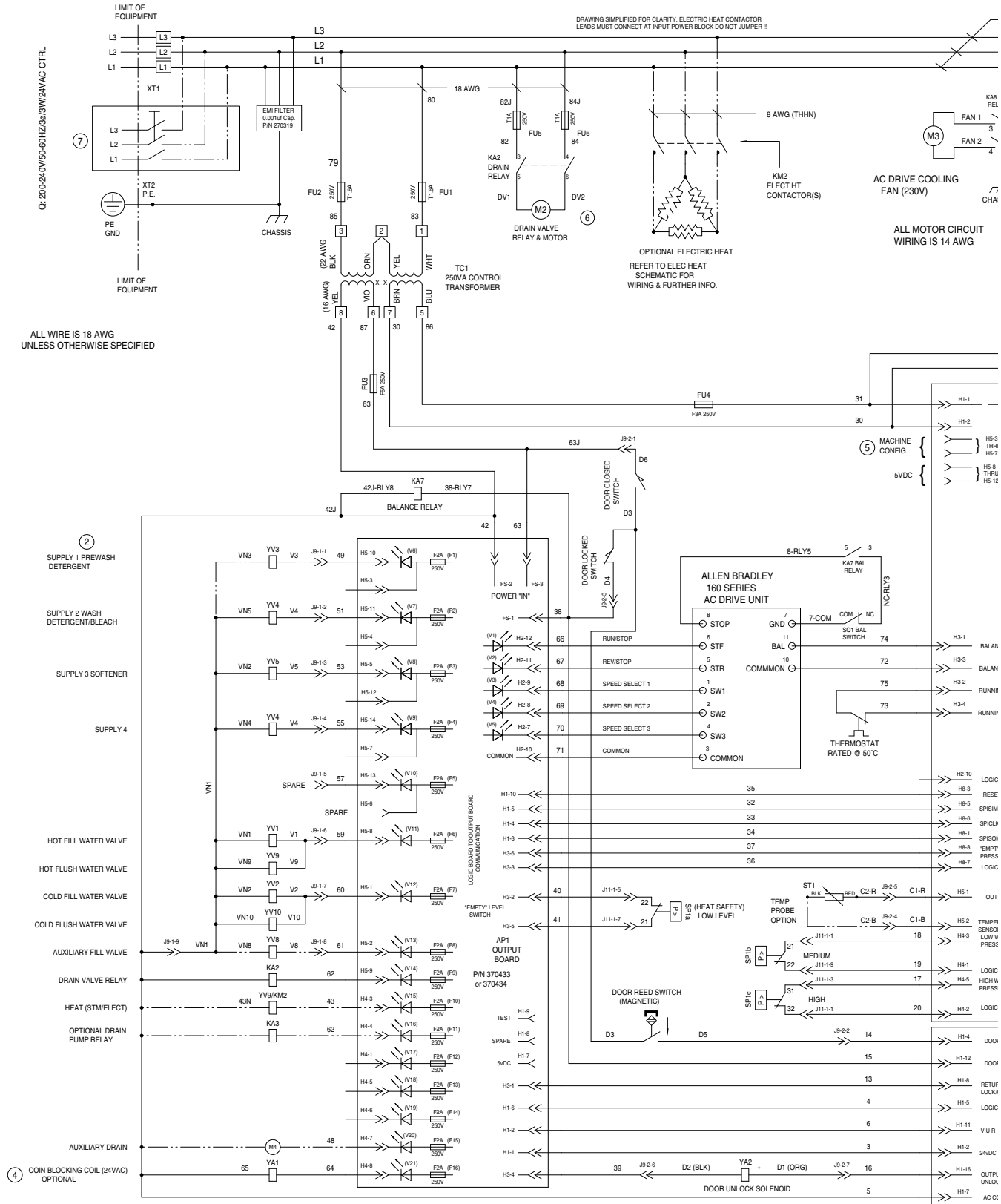
## 14. VFD Analysis



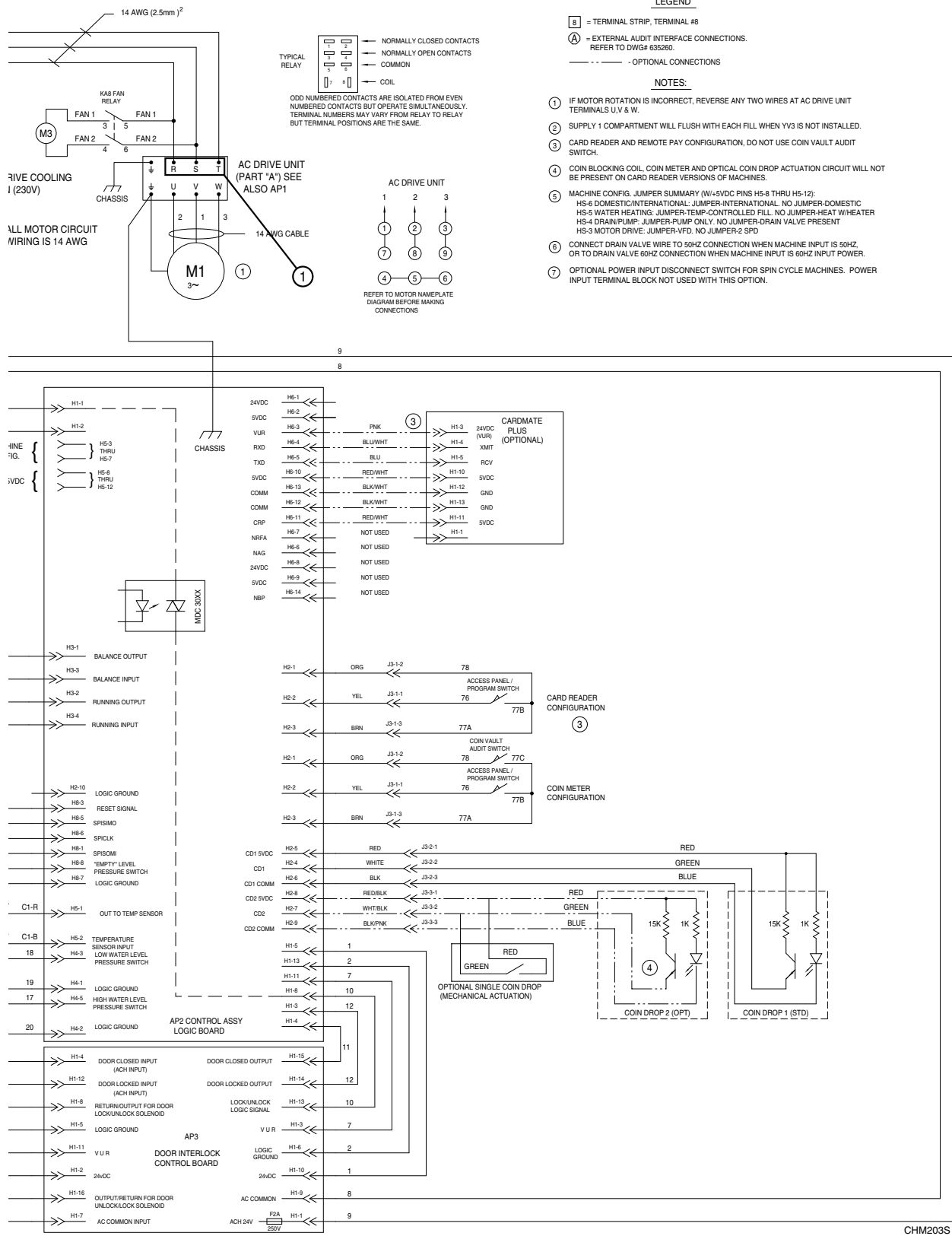
CHM200S

**Please see following 2 pages for wiring diagram information.**

# VFD Analysis (Sheet 1 of 2)

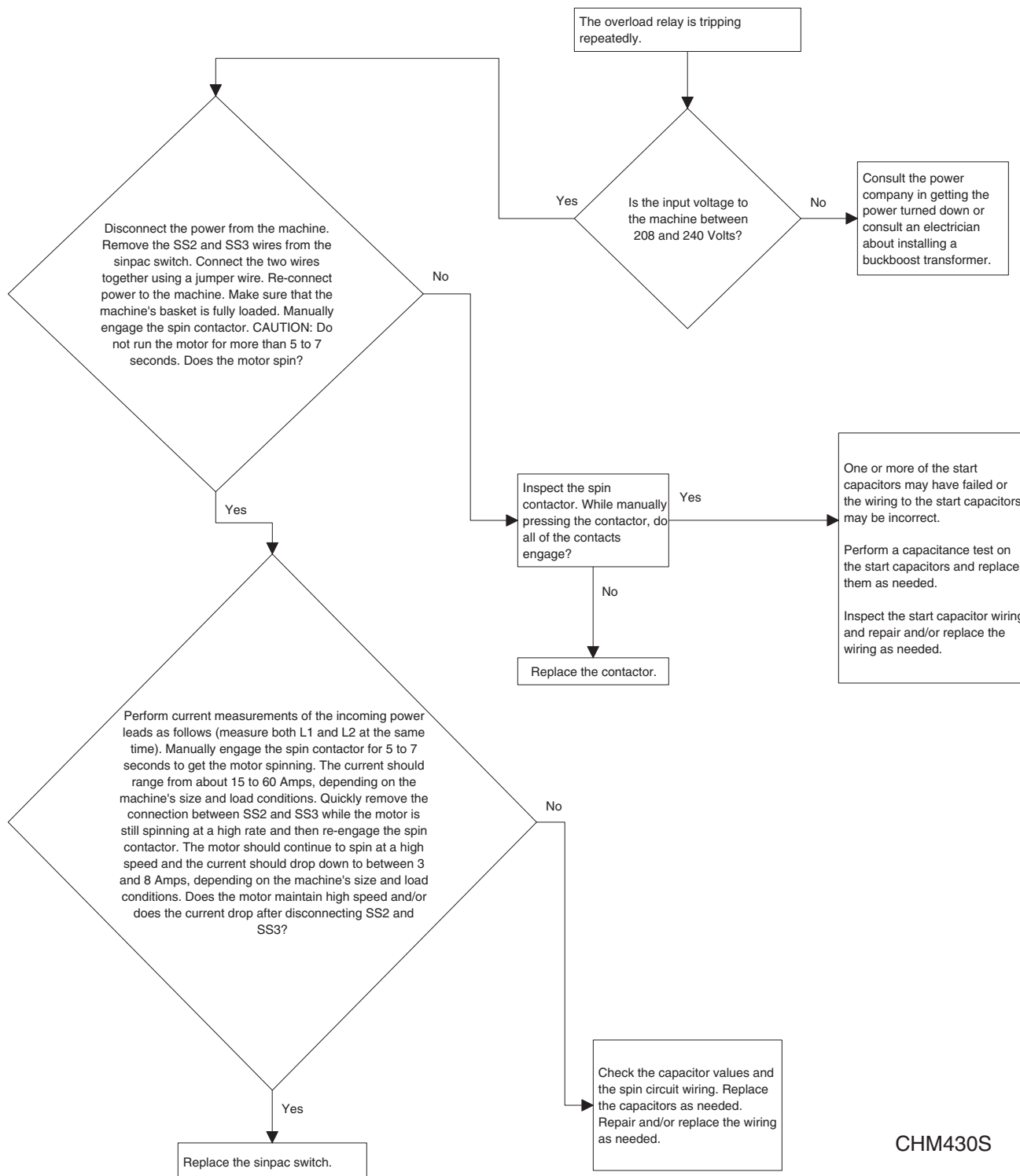


# VFD Analysis (Sheet 2 of 2)



# 15. Overload Relay Tripping Repeatedly

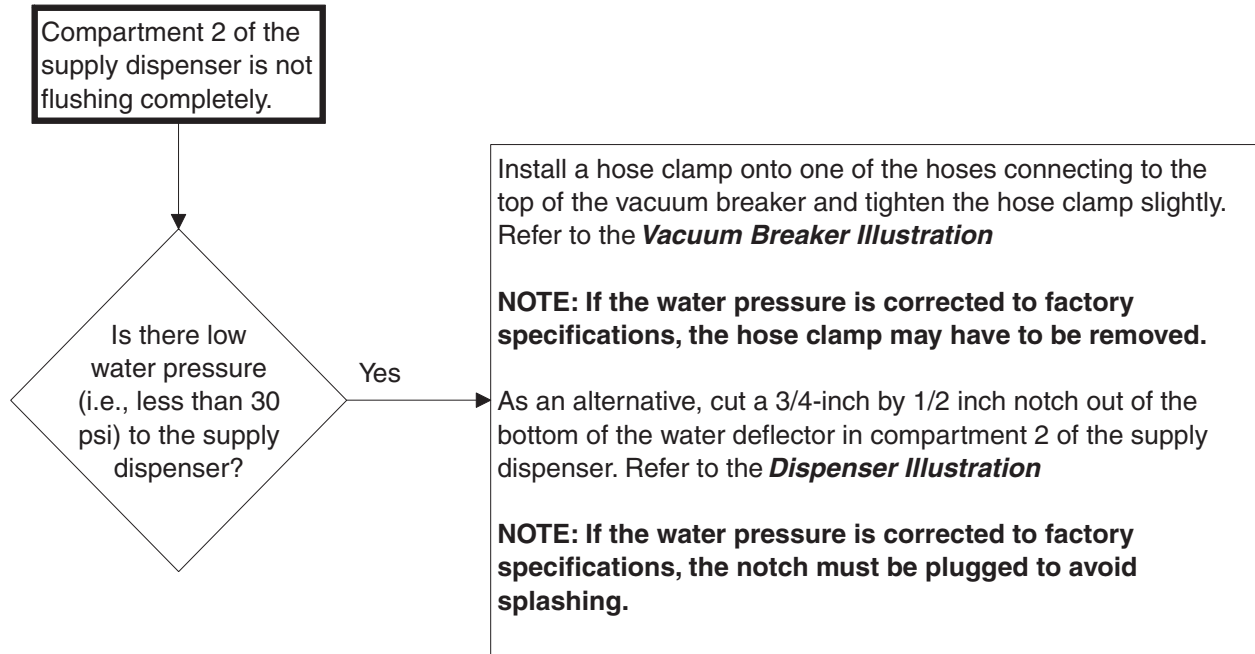
Repeated overload tripping may result from a failed sinpac switch. Symptoms of a failed sinpac switch may include motor humming without rotation during spin or high current during running speed.



CHM430S

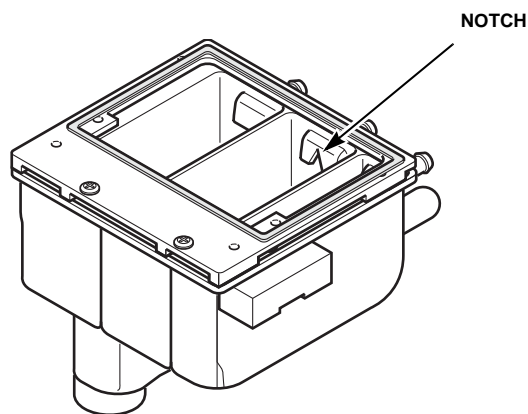


## 16. Compartment 2 of Supply Dispenser Not Flushing Completely



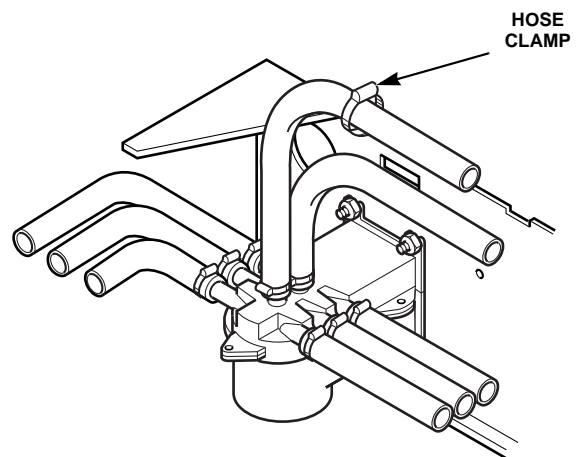
CHM443S

**Dispenser Illustration**



CHM366S

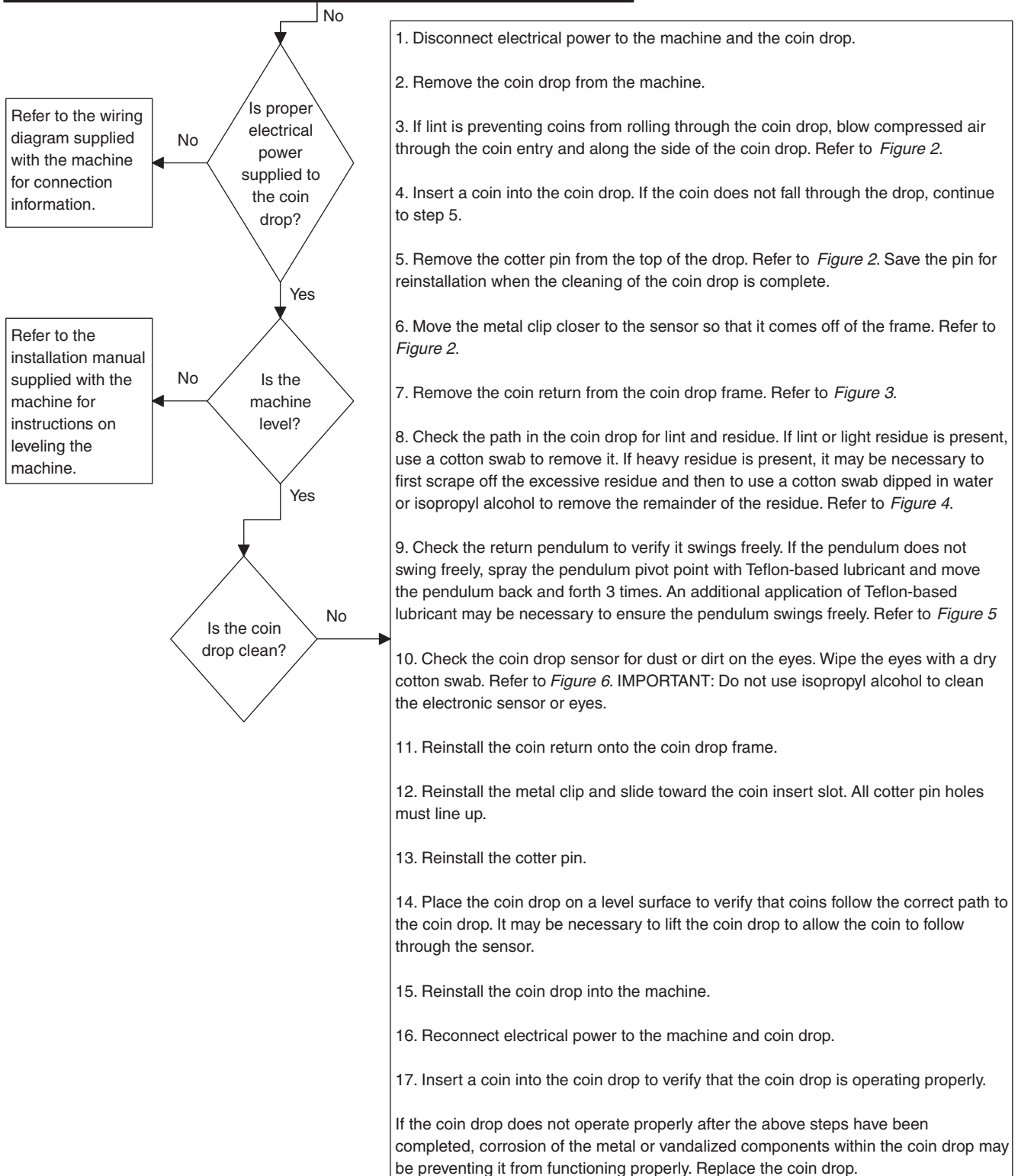
**Vacuum Breaker Illustration**



CHM441S

# 17. Troubleshooting and Cleaning the Coin Drop

When coins are placed into the coin slot, do they fall into the coin vault and does the coin drop sensor register that coins have been entered? Refer to *Figure 1* for the path that coins follow when the drop is working properly.



CHM456S

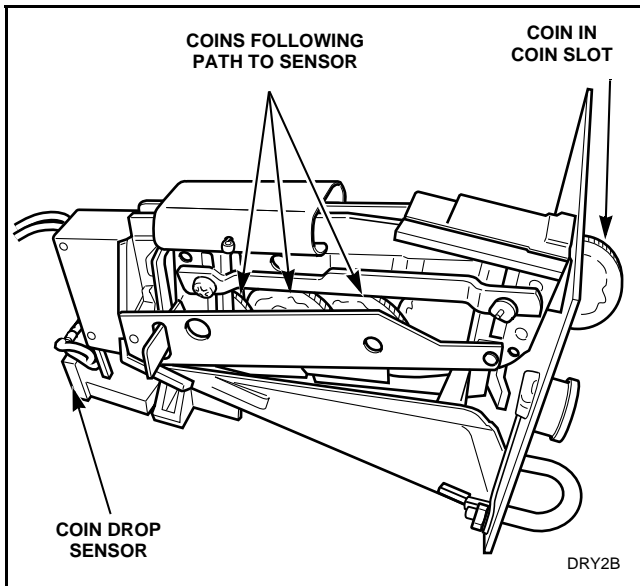


Figure 1

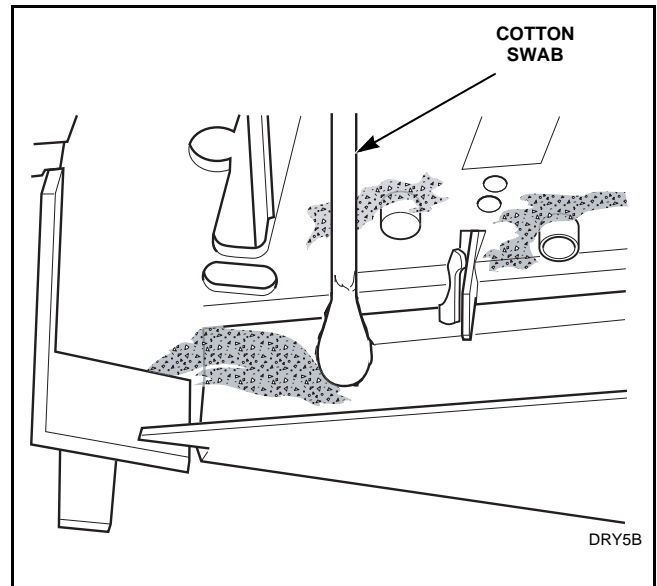


Figure 4

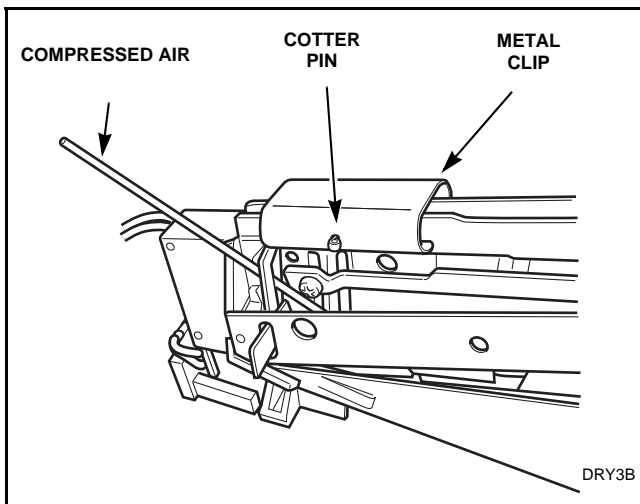


Figure 2

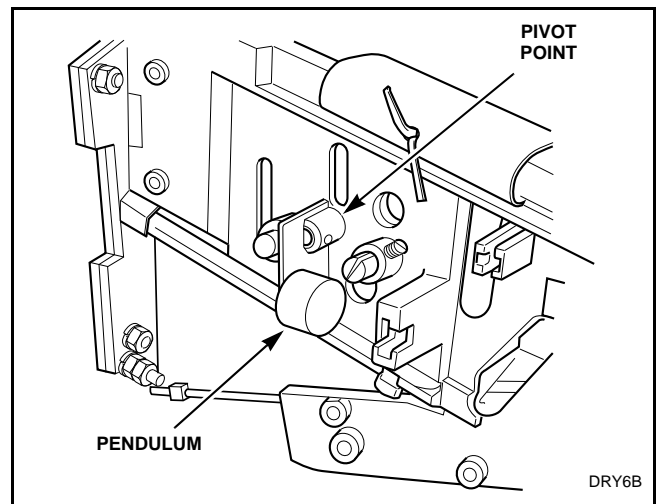


Figure 5

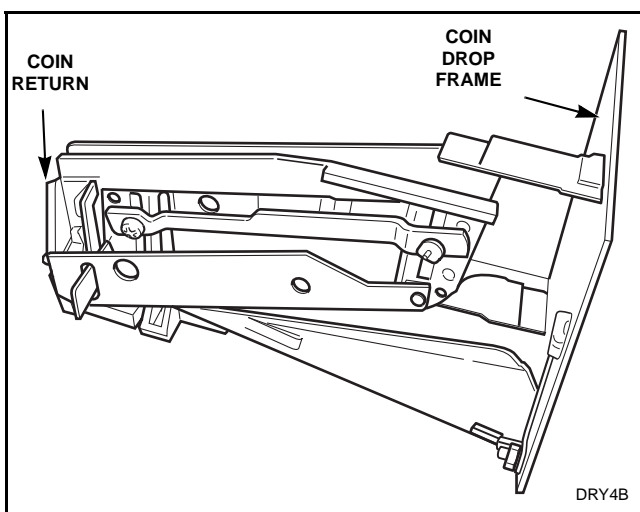


Figure 3

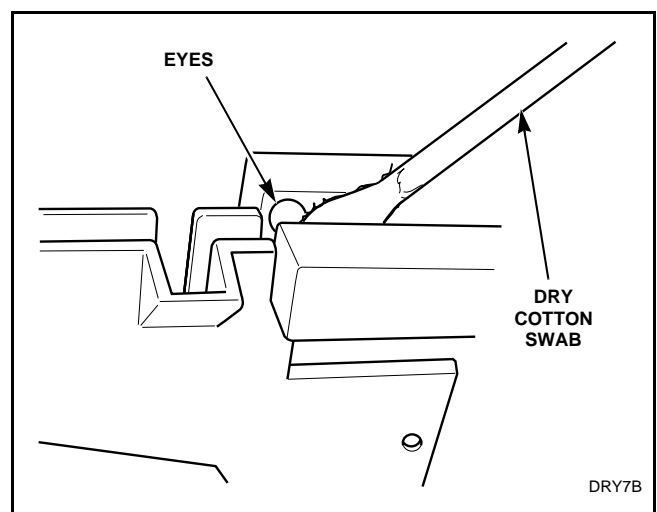


Figure 6